

Midicake UNA

User Manual

Capture a chord. Build a band. Play!

Manual v1.0 · 2026
Applies to firmware v1.0 and later

© 2026 Midicake Ltd · midicake.com

Contents

[Home](#)

[Getting started](#)

[The instrument](#)

[The tracks](#)

[System](#)

[Maintenance](#)

[Reference](#)

[Legal & support](#)

Midicake UNA - user manual

Capture a chord. Build a band. Play!

A hands-on hardware composer for keyboards, synths, and the people who play them live.

Manual v1.0 - 2026. Applies to firmware v1.0 and later.

From the Midicake team

Thank you for buying UNA.

UNA is a hardware instrument for players who want more music from fewer hands - a way to sketch, shape, and perform a full three-part composition in real time, on the surface of a single unit, without a computer or a mouse in sight. Every knob, every button, every parameter was designed to feel immediate - to reward experimentation, to invite happy accidents, and to keep you playing.

We build our instruments to last. That's true of the hardware, and it's true of the firmware - free updates keep expanding what UNA can do, and there is a rolling roadmap of new features driven by what our players tell us they want. If you have ideas, questions, or something's not working, please get in touch. You'll hear back directly from the people who made it.

Now - plug in, dial in a chord, and start listening.

- The Midicake team

How to use this manual

This manual will get you from out-of-the-box to performing in about ten minutes, or give you a fully comprehensive guide to all of UNA's deeper features when you are ready for more; the chapters are written to work either way.

The manual is structured for two reading paths: a **Quick Start path** (Chapters 1, 2, then jump as needed), and a **reference path** (any chapter, any time). Chapter 5 sits between them - read it once, near the start, and the rest of the manual makes immediate sense.

Getting started

Chapter 1 - Welcome & Overview

Welcome to UNA.

Midicake UNA is a hardware MIDI performance-sequencer that lets you build a complete, evolving three-layer composition in minutes - a melody that responds to your chords, a chord progression that drives everything, a bass line with its own improvisation - then play over the top while UNA keeps the music evolving. Eight hands-on knobs, four MIDI outs (2× TRS, plus USB Device and USB Host), instant and seamless patch recall, plus powerful modulation and performance tools.

Who is UNA for?

UNA is for keyboard players, synth users, and MIDI tinkerers who want more music from fewer hands. We designed it around four types of players:

- **The Solo Performer** - create full-band arrangements without a band.
- **The Composer** - sketch ideas faster so you don't forget them.
- **The Studio Musician** - layer complexity with ease.
- **The Improviser** - build a structure for your musical freedom.

Whatever your approach, the ideas you'll uncover with UNA's help will enhance any music-making.

What's in the box?

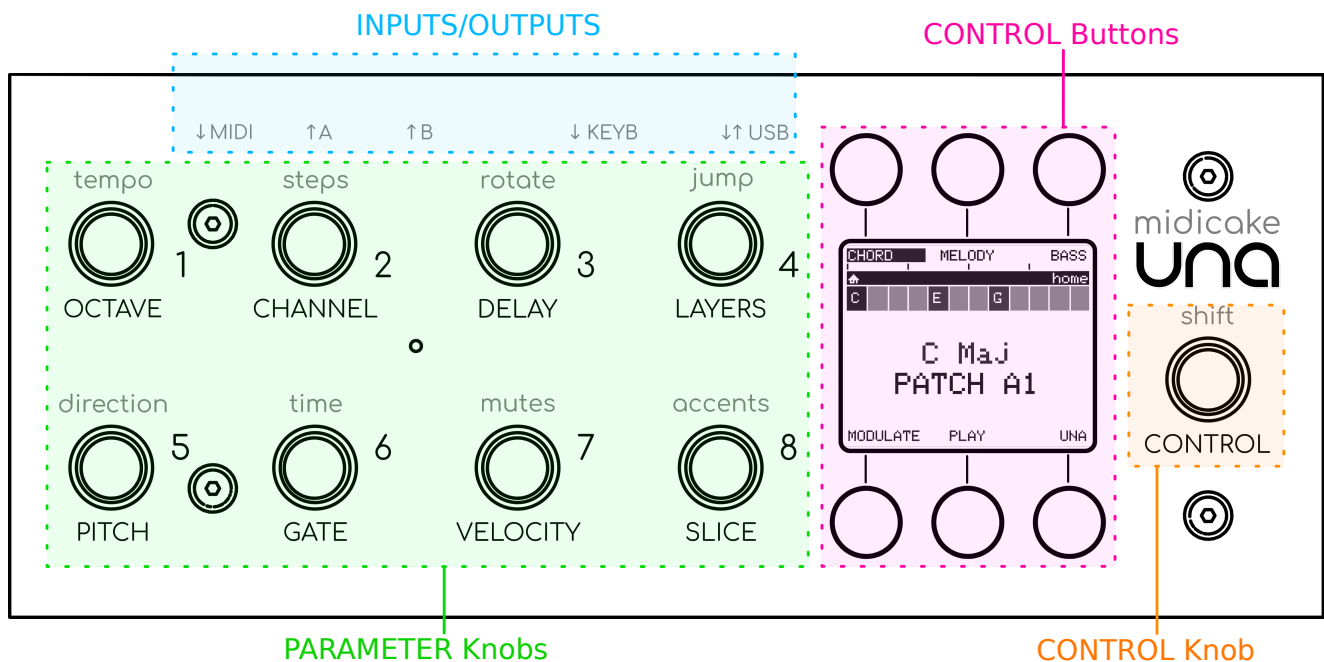
- UNA itself.
- A USB-C cable: for power and computer-to-UNA MIDI.
- Two MIDI DIN to TRS-A cables: for connecting traditional 5-pin MIDI gear.
- A Quick Start Guide: a printed card to get you going fast.

This manual is the deeper dive and can be downloaded or viewed online.

A note about MIDI cabling: UNA's MIDI jacks use the MIDI Standard **TRS Type-A** connectors. The two cables in the box are for bridging UNA to traditional 5-pin DIN gear. See Chapter 15 for the MIDI side in detail.

A quick orientation

UNA plays **three tracks** at once: a Chord Track, a Melody Track, and a Bass Track. The Chord Track holds a captured chord progression that drives the others - when the chord changes, the Melody and Bass shift to stay in harmony too. You can hear or hide each track independently via the Mixer.



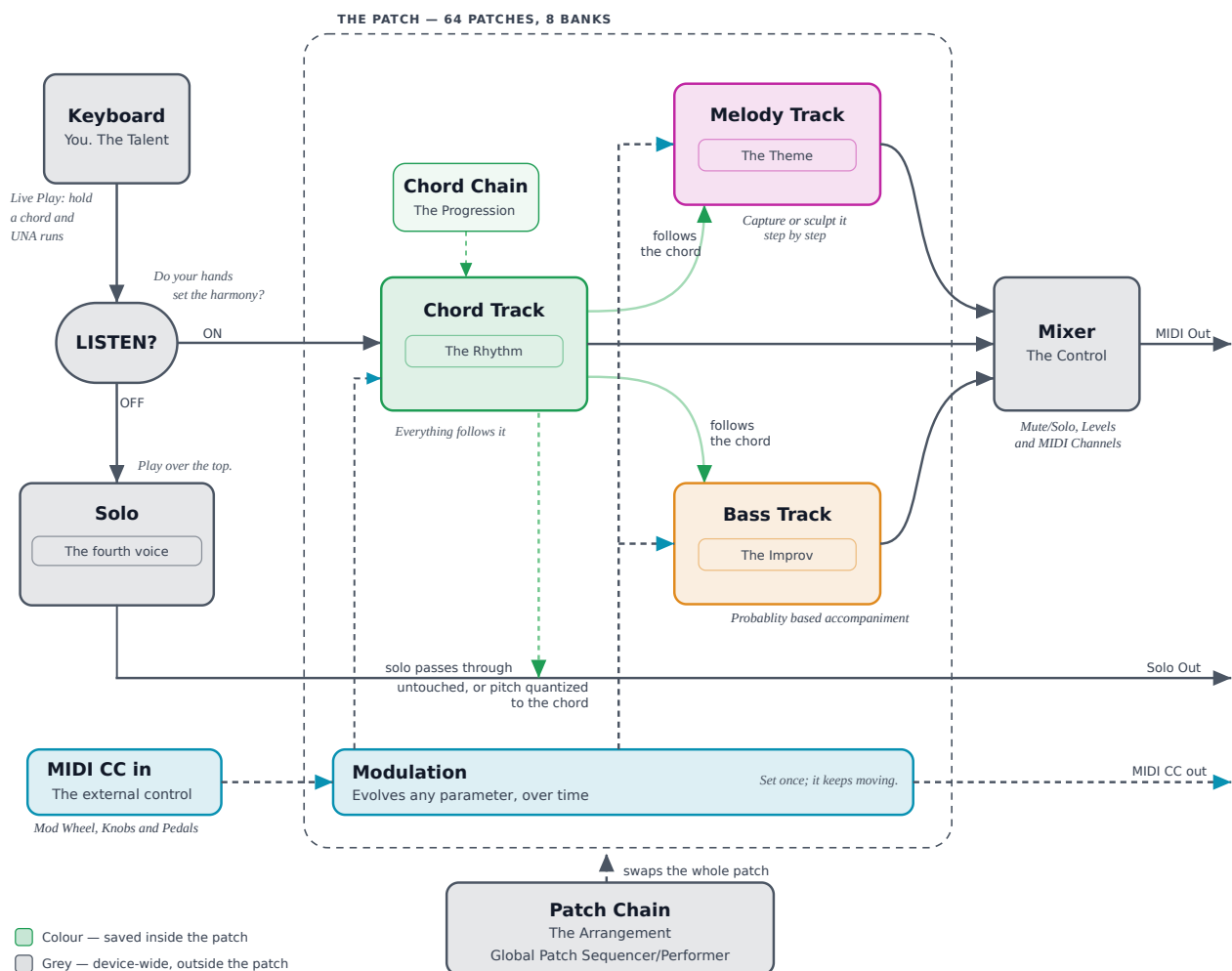
Each track has 16 parameters, reachable from the 8 PARAMETER Knobs (rotate for primary parameters, press-and-rotate for secondary). The Melody Track can be step-sequenced; the Bass Track evolves through a probability-based system called **Improv**; the rhythmic Chord Track is built from your chord progressions.

A **Modulation** system can evolve any parameter or MIDI CC output automatically over time, in 5 styles (Shape, Seed, Pattern, Macro, & CC Input), either continuously or as one-shot bursts.

All features are accessible via the **Performance Mode**. The **Listen** toggle allows you to select whether the notes you play on your keyboard set the chord in real time, or whether UNA stays locked to what you've recorded so you can play solo on top.

Play / Stop controls the playback; but even when stopped, holding a chord on your keyboard sets UNA running for as long as you hold it - a behaviour called **Live Play** (Chapter 5). A sustain pedal (CC64) can latch it so it keeps running while you change chords.

Everything you build is saved as a **patch**. UNA holds 64 patches across 8 banks (A–H) of 8, autosaving as you edit. Switching patches mid-performance is seamless - UNA preserves the playback position so the new patch transitions without a jump. You can also build patches into an arrangement by building Patch Chains.



Colour marks what a patch saves. Grey marks the things that live on the device, outside any patch.

Where to start

Three paths from here:

- **Just play.** Skip to **Chapter 2 - Quick Start** for a 2-minute path to sound.
- **Let UNA show you around.** UNA's built-in **Tutorial Mode** walks you through every main mode and helps you choose the settings that suit your setup. It runs automatically the first time you power UNA on, and you can re-enter it any time later. **Chapter 3** explains how it works.
- **Read first, play later.** Continue to **Chapter 5 - Core Concepts** for the full mental model. Chapters 2 and 4 (Quick Start, Anatomy) are useful but not essential at this stage.

Either way, welcome aboard.

Chapter 2 - Quick Start

This chapter gets you to a sound in about two minutes. Nothing here needs explaining first - the ideas behind it are in Chapter 5, and they'll make more sense once you've heard UNA do its thing.

Connect

1. **Power UNA** from the USB-C cable - a wall adapter or a computer, either is fine. UNA wakes on the patch it was last using; a new unit starts on **A1**.
2. **Connect a sound source.** Run a cable from **MIDI Out A** to your synth. For 5-pin DIN gear, use one of the TRS → DIN cables from the box.
3. **Connect a keyboard**, if you have one - into **MIDI In**, or straight into the **USB Host** port. You don't strictly need one, but UNA is much more fun with a keyboard.

Make a sound

Hold a chord on your keyboard.

That's it. UNA starts playing melody, bass and chords together, and stops when you let go. This is **Live Play**, and it's the fastest way to hear an idea.

Now, **change the chord**. The melody, bass, and chord tracks shift with you, staying in key. That's the whole instrument in one gesture: you supply the notes, UNA supplies the harmony.

Two ways to let go of the chord and play over the top:

- Press **PLAY** if you'd rather UNA kept running with your hands free.
- Hold a **sustain pedal** (CC 64) and Live Play latches - it keeps running while you lift your hands and change chord.

UNA ships with eight factory patches in Bank A - each one a different way of sequencing a single instrument. Load them from the patch browser and use them as starting points; the full list is in Chapter 14.

If you hear nothing

Three things, in order:

1. **Is your synth listening on the right channel?** The factory patches send all three tracks on **Channel 1**, so a synth on Channel 1 hears everything; your own patches can put each track on its own channel. The quickest general fix is to set your synth to receive on *all* channels (omni). Chapter 15 covers channels in depth.

2. **Is the cable in the right socket, the right way round?** It should run from UNA's **MIDI Out A or B** to your devices **MIDI IN**.
 3. **Is anything actually running?** Hold a chord, or press **PLAY / STOP**. If the transport is running and you still hear nothing, quick press the **CONTROL Knob** to open the mixer - a **grey** slider means that track is muted. Press **PARAMETER Knob 1, 2 or 3** to unmute.
-

Some key principles

The chords lead. Hold a chord. Change it. Everything follows. Turn **Listen** off (quick press the **CONTROL Knob**, then **LISTEN**) and UNA locks to the last chord or chord progression - now you can solo over the top without your playing changing the harmony.

Shape the melody live. Press and *hold* the **MELODY** button to make it the active track, then turn any **PARAMETER Knob**. The display names the parameter and its value as you move it, and the melody reshapes under your fingers while it plays.

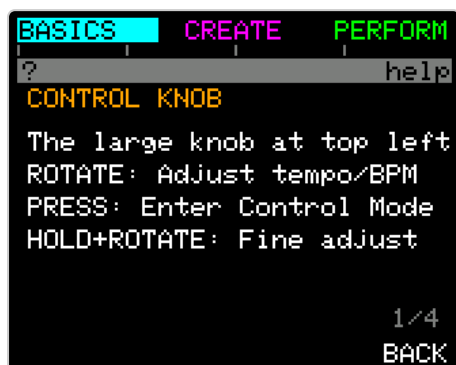
The change sticks - patches save themselves as you edit. If you'd rather push a value just for a moment, **hold the CONTROL Knob while you turn**: it springs back the instant you let go.

Drop the band. Quick press the **CONTROL Knob** and press **PARAMETER Knob 1** to mute the Chord Track. The chords fall silent, but the progression keeps driving the melody and bass underneath. Press it again and the chord track comes back in. That's dynamics, with one finger.

Where to go next

You've heard what UNA does. **Chapter 5 - Core Concepts** explains why, and it's the one chapter worth reading in full. After that, jump to whichever track you want to dig into: Chord (Chapter 8), Melody (Chapter 9), or Bass (Chapter 11).

Chapter 3 - Tutorial Mode



Tutorial Mode is UNA's built-in guided walkthrough. The first time you power UNA on, it starts automatically - taking you through each of the main modes in turn (Chord, Melody, Bass, Modulate, and Performance) and helping you choose the settings that suit how you'll use it. You can skip any section, exit at any point via a confirmation screen with restart instructions, and re-enter the tutorial any time later via the Control space (quick press the CONTROL Knob → MENU → HELP).

The full chapter will cover:

- What happens at first-time startup - the automatic Tutorial launch, and how to opt out if you'd rather dive straight in.
- Navigating Tutorial Mode - moving section to section, skipping ahead, going back.
- Setting up your preferences during the tutorial - keyboard split, MIDI routing, default mode, and any other one-time choices the tutorial offers.
- Exiting Tutorial Mode - the confirmation screen, what it tells you, and how to come back to it.
- Re-running the tutorial later - entering it via the Control space (quick press the CONTROL Knob → MENU → HELP) whenever you want a refresher or to walk a new collaborator through UNA.

The instrument

Chapter 4 - Anatomy of UNA

This chapter names every physical control, it's a reference to the terms used the rest of the manual.

The Top Panel

[DIAGRAM - Top panel callout] *Numbered callouts for the 8 PARAMETER Knobs, the CONTROL Knob, the 6 CONTROL buttons and the display; art pending.*

The 8 PARAMETER Knobs

Eight endless rotary encoders sit on the left side, numbered **1** to **8** from left to right. They are the hands-on surface for the currently active track.

Each knob carries **two layers** of parameters, which is how 8 knobs reach 16 parameters per track:

- **Rotate** - adjusts the knob's *primary* parameter.
- **Press and rotate** - adjusts its *secondary* parameter.

A knob **press** on its own is a context action rather than an edit. In the Mixer, for example, pressing Knobs 1, 2 and 3 mutes the Chord, Melody and Bass Tracks respectively.

The two-layer model is explained properly in Chapter 5, and every per-mode assignment is tabulated in Appendix F.

The PARAMETER knobs also serve as controls for the Modulation (Chapter 12), Patches (Chapter 14), and Suggested Chord modes (Chapter 8).

The CONTROL Knob

A single encoder on the right side. Its function depends on the mode you're in - it is the main navigation control, and pressing it from a track's home screen opens the **Control space** (Chapter 6). Its per-mode behaviour is listed in Appendix F.

The 6 CONTROL Buttons

Six button surround the display. They are **context-sensitive**: their meaning changes with the mode, and the button's current function is shown adjacent to it on screen.

Appendix F carries the full per-mode function table.

The display

A **160 × 128 colour screen** shows the current mode display and the labels for the six CONTROL buttons. The screen can also be mirrored live into **Midicake Connect** over USB, so you can see exactly what the unit is showing on a larger display.

The LEDs

Each of the six CONTROL buttons has a **full-colour LED** beneath it. The colour tells you, at a glance, the state of that button's current function.

The buzzer

UNA has a small onboard **buzzer**, used to produce the **metronome click** (Chapter 13). The click is audible from the unit itself.

The rear panel

[DIAGRAM - Rear panel] *Port callouts, left to right; art pending.*

- **USB-C** - power, and class-compliant MIDI to and from a computer. This is also how UNA talks to Midicake Connect.
- **USB Host (Type-A)** - plug a class-compliant USB MIDI controller straight into UNA, no computer required. See the power note in Chapter 15 before connecting a bus-powered controller.
- **MIDI In (TRS Type-A)** - 3.5 mm jack. Use the supplied TRS → DIN cable for 5-pin gear.
- **MIDI Out A (TRS Type-A)** - 3.5 mm jack. MIDI output.
- **MIDI Out B (TRS Type-A)** - a second MIDI output.
- **Firmware Update** - a recessed button used only when flashing new firmware (Chapter 18).

The two TRS outputs are routed independently: the same track can go out of both, or each can carry a different set of tracks. That's configured in the Menu and explained in Chapter 15.

The Colour Language

UNA uses colour to help you recognise where you are and what a control is doing. The same colours appear on the button LEDs and on the display. This is a rough guide, not a strict code.

The three track colours:

Colour	Track
 Green	Chord
 Magenta	Melody
 Orange	Bass

A few function colours turn up often enough to be worth recognising:

Colour	Meaning
 Cyan	Modulation
 Red	Record - and Stop
 Green	Play
 Blue	Metronome
 Pale green	Menu and Configuration
 Grey	Unavailable / disabled

Two colours mark a parameter you're editing (Chapter 6):

Colour	Meaning
 Yellow	A <i>temporary</i> edit - it snaps back when you let go
 Purple	A <i>staged</i> edit - held, waiting to be applied

Don't read too much into it. A colour can do more than one job - for example, yellow also marks **Listen** and accented steps - so take it as a hint alongside the label on screen, not as a rule.

Chapter 5 - Core Concepts

Three Tracks

UNA plays three musical tracks at the same time:

- **The Melody Track** - a sequence of notes that follows the underlying chord progression.
- **The Chord Track** - the chord progression itself, played out audibly as a rhythm or drone.
- **The Bass Track** - an independent bass line that follows the same progression.

You don't switch between tracks, they all play together. What you switch between are **modes** - and modes are how you interact with each track.

The three tracks are musically independent: changing the Bass Track's parameters doesn't affect the Melody Track, and changing the melody doesn't perturb the bass. What the tracks *do* share is harmony. The played chord or chord progression you've captured creates a **note pool** - the set of pitches that make up the current chord - and every track draws its notes from that pool. When the chord changes, every track shifts to the new harmony together, keeping it coherent.

There's only one tempo for the whole unit, but each track has its own *time* parameter that decides how fast it advances against that tempo. Combined with optional dotted or triplet rhythms per track, this allows the Melody Track to run at one rate, the Bass Track at another, and watch polyrhythms emerge naturally over the same beat.

The Tracks can each be enabled or disabled at will, via the Mixer.

Modes are for editing.

When you power on, you land in **Performance Mode** - UNA's the home screen. From here, a single button press takes you into one of the four main modes:

- **Chord Mode** - edit the Chord Chain (progression) and Chord Track.
- **Melody Mode** - edit the Melody Track.
- **Bass Mode** - edit the Bass Track.
- **Modulate Mode** - set up the modulation that evolves your tracks over time.

In addition, a quick press of the **CONTROL Knob** opens the **Control space** (the **Mixer**, plus the **Metronome**, **Listen** toggle, and the **Menu**).

The crucial part: **the music keeps playing regardless what mode you are in**. Pressing the BACK button returns you to previous mode.

The Chord Chain vs. the Chord Track

Once you've recorded a chord progression in Chord Mode, UNA holds an internal **chord chain** (the sequence of chords you captured). The chord chain *drives all Tracks*: as the chord changes through the progression, the Melody, Bass, and Chord Track's notes adapt to stay in harmony.

Whether those chords *come out as sound* is a separate choice. Enable the **Chord Track** and UNA sends the chord notes out as MIDI to your synth. Disable the Chord Track and the chord chain still drives the melody - you just don't hear the chords directly.

This separation is the reason UNA suits very different setups. A solo synth player might enable all three tracks for a full-band sound. A live keyboardist soloing over the top might enable only the Melody Track and rely on UNA's chord-awareness to stay in key. UNA doesn't impose a workflow; it gives you the building blocks.

The LISTEN toggle

You can access the LISTEN toggle via the **Mixer**.

With **LISTEN on**, the notes you play on a connected keyboard override the captured chord chain. Every track shifts to fit the chord under your fingers. Use this when you're improvising harmony, exploring an arrangement, or playing UNA against a song where the chords change in ways you haven't pre-recorded.

With **LISTEN off**, UNA continues playing the current chord or the captured chord chain. The tracks play predictably - and you're free to solo on top.

A Menu option controls how **MIDI Thru** behaves while you're playing into UNA (whether your incoming notes are also routed straight through to your synth so you hear them as you play).

There are three choices:

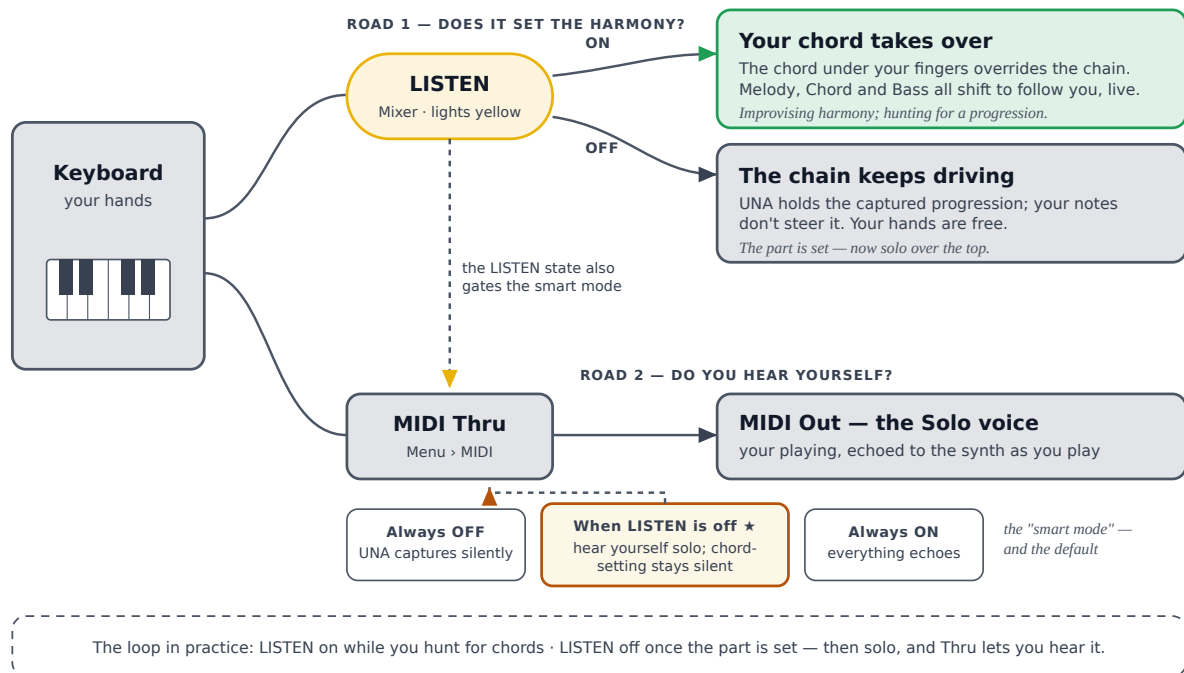
- **Always OFF** -UNA captures silently
- **When LISTEN is off** - you hear yourself soloing, but the chords you set or capture don't pass through
- **Always ON** - Everything is passed through

See Chapter 15 for the full reference.

You can toggle **LISTEN** constantly: **on** while you're searching for the chords, **off** once the part is set and you want UNA to drive itself.

Your playing takes two roads

LISTEN decides whether your hands steer the harmony. MIDI Thru decides whether you hear yourself. They're independent.



Play and Stop

UNA's sequencers are either running or stopped. Use the **PLAY/ STOP** control to switch between the two.

When playing, clock and note messages are sent via the MIDI Outs. When stopped, the music holds - you can wire things up, edit a track, or load a patch without any sound coming out. Importantly, you don't need to stop to make changes.

Live Play

There's a third way to make UNA run...

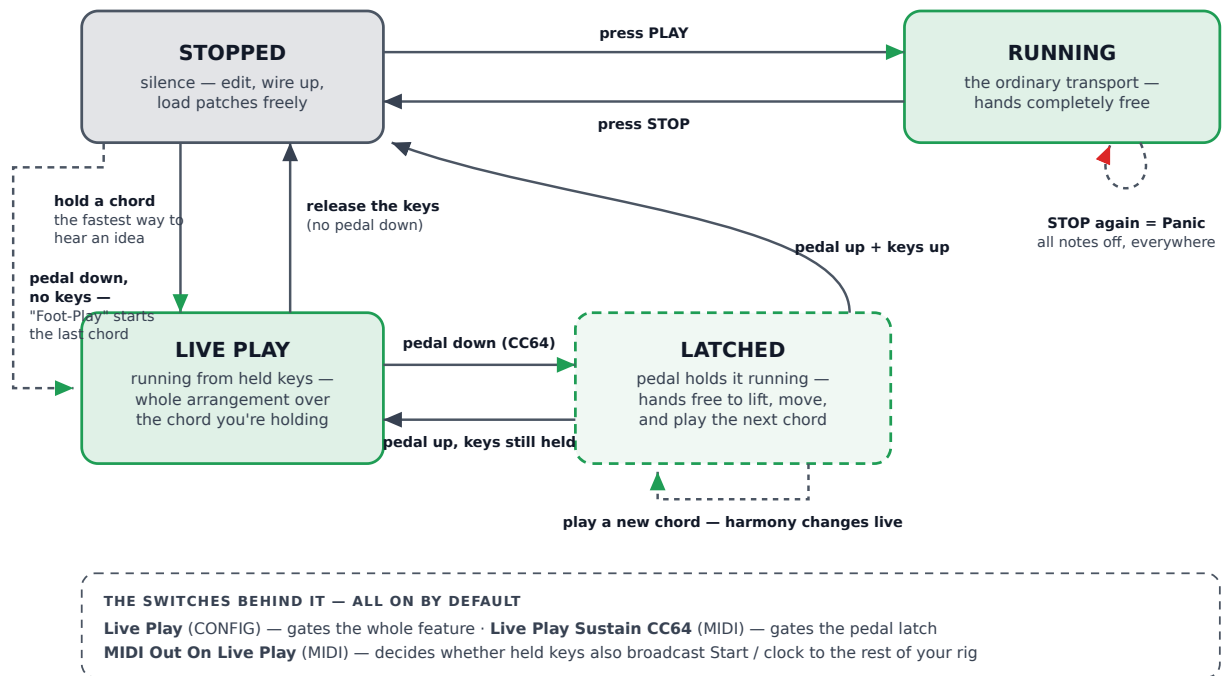
Even when stopped, **hold a note or chord on a connected keyboard and UNA starts playing**. Let go of the keys and it stops again. This is **Live Play**, and it's the fastest way to hear an idea: no transport, no arming, just play a chord and the whole three-track arrangement runs over it.

Holding a chord down to keep the music going is fine for an audition, but awkward if you want to *change* the chord. So using a **sustain pedal** solves it: press your pedal (CC64) and Live Play **latches**, staying alive while you lift your hands, change chord, and play again. Release the pedal and the keys and Live Play will end.

Both behaviours are on by default and can be turned off in the Menu - **Live Play** and **Live Play Sustain (CC64)** (Chapter 17). Chapter 16 covers how Live Play interacts with clock and transport.

You don't have to press Play

Hold a chord and UNA runs. Let go and it stops. A sustain pedal latches it. The transport is still there when you want it.



Deterministic Playback

Patch and parameter changes apply immediately, even mid-bar. Plus, UNA's deterministic nature ensures only smooth transitions. When you switch a parameter or load a new patch, the resulting pattern continues as if it had always been playing, picking up at the position UNA was already at. The transitions feel seamless because UNA never forgets where it is in the bar; it just resumes with the new settings.

What's underneath: the sequencer

The **Melody Track** is a step sequencer, up to **32 steps** long - all visible on the display at once. The Tempo, along with each track's time parameter, controls how fast the sequencer advances; the time signature determines how steps fit into bars.

Internally, UNA runs at a high time-resolution - **384 ticks per bar** - which gives precise control of swing and microtiming, without the music feeling locked to a stiff grid.

The **Bass Track** is also a sequencer, but with a different editing surface. While, the Melody Track exposes a per-step grid called the **Stepper** (Chapter 10), where each parameter is editable on every step, the Bass Track evolves through a probability-driven system called **Improv** (Chapter 11). The design intent: Melody is where you sculpt notes precisely; Bass is where you set up rules and let UNA generate variation.

The **Chord Track** is structured around chord chains rather than a step grid; it isn't sequenced the same way. Instead, it can play Chord rhythms or drones, that can pad out your sound. (See Chapter 8).

Track Parameters

The 8 PARAMETER Knobs control parameters on the *currently selected track*. There are two levels of parameters per knob:

- **Rotate** a knob → adjust the *primary* parameter.
- **Press and rotate** a knob → adjust the *secondary* parameter.

[DIAGRAM - Knobs and parameters] *The two-layer model: rotate for parameters 1–8, press-and-rotate for 9–16; art pending.*

That gives 16 parameters per track, all reachable from the same 8 physical knobs. The display always shows the parameter you're currently changing (name and value).

There's a loose but useful distinction between the two levels:

- **Primary parameters can affect individual steps**
- **Secondary parameters affect the sequence as a whole**

Pitch and gate length, for instance, live on the primary layer. You can give each step its own pitch, and its own gate. Parameters that apply to the whole sequence, e.g. number of steps, direction, patterns, etc. live on the secondary layer.

Note: **only primary parameters can be step-sequenced**, and step-sequencing only happens on the Melody Track (Chapter 10).

For a full reference to every parameter - what it controls, its range, and any track-specific quirks - see **Chapter 7 - Track Parameters**.

Temporary Changes

To temporarily change a value;

- press and hold the CONTROL Knob while you turn a PARAMETER knob

...to nudge the associated parameter value (e.g. Velocity) for as long as you hold - it snaps back the moment you let go. It's a performance gesture for non-destructive, in-the-moment tweaks, and it leaves your patch untouched.

Targeted Changes

To jump to a specific parameter value, without invoking every value between the current and the desired value;

- press and hold a **PARAMETER** knob while you turn the **CONTROL** knob

This sets the new value when you release both knobs. It's a gesture that prevents unwanted behaviour, such as cycling through (and hearing) every synth on every MIDI Channel between your current and targeted channel.

The Control Knob

The **CONTROL** Knob's role changes by mode.

In the main modes (Performance, Chord, Melody, Bass) a quick press opens the **Control space**.

Yet, for example, in Chord > Edit, it selects the current chord. In Modulate Mode, it selects the modulator. Appendix F has the complete per-mode reference.

Modulate - variation that evolves over time

Once a track is set up, a **Modulator** can evolve its parameters automatically, over bars or minutes. A Modulator changes how a parameter drifts over the next stretch of music - turning a static loop into something that moves.

Every Modulator has two ingredients: a **source** and a **target**.

- The **source** is what generates the modulation value.
- UNA offers: a **Waveform** (LFO-like time-based modulation), a **Random** value that re-rolls per step, **Step Sequence** and **Time Sequence** patterns, or **user input** from an external MIDI CC, mod wheel, aftertouch, or UNA's own knobs.
- The **target** is what the Modulator moves.
- It can be any track or sub-mode parameter (Pitch, Gate, Modulator Amount, and so on), or it can be a **MIDI CC output** - so a Modulator can drive an external synth's filter cutoff as easily as it can drive one of UNA's own parameters.

One Modulator has one source and one target. To modulate several parameters together, use several Modulators - they can share the same source, so a single "ramped" waveform can drive the Melody pitch, Chord Rhythm timing, and CC-mapped filter sweep on an outboard synth, all locked in phase.

Modulators can also target *other Modulators* - a slow wave can move a fast wave's Amount, letting a long swell shape the intensity of a fast tremolo. This is UNA's route to complex evolving motion, built from simple building blocks.

Each Modulator can run **continuously** or as a **one-shot** - a one-shot fires when triggered and runs for a time period you decide. Great for one-bar fills and live drama.

There are two kinds of Modulator, distinguished by scope.

- **Patch Modulators** save with a patch, so they're song tools - the modulation belongs to *this arrangement*, and switching patches switches Modulators with it.
- **Global Modulators** persist across every patch, so they're studio tools - a slow evolution that shapes a whole set, a live-controlled CC output that always drives your outboard reverb, a manual macro you keep on hand for the whole session.

Both kinds of Modulator behave identically; only their scope differs.

(See Chapter 12 for the full Modulator reference.)

Patches and banks

A **patch** is a complete snapshot of what you've built: chord chain, track parameters, steppers, modulators, and the state of every mode.

UNA stores **64 patches** across **8 banks** (A–H); 8 per bank.

Patches autosave whenever you edit - you don't have to think about saving.

A patch *doesn't* include device-wide settings: MIDI input channels, output routing, clock and sync, and so on. Those live as "Globals" in the **Menu** and persist as you switch between patches. (Chapter 14 covers the patch system in full; Chapter 17 covers global menu options.)

Performing with patches

In live performance, patches are the building blocks of a song. You might create a Verse patch, Chorus patch, Bridge patch, and so on.

Switching patches mid-performance happens seamlessly: UNA preserves the playback position deterministically, so the new patch picks up from wherever you were in the bar without a jump.

You can also create a fully automated song arrangement using **Patch Chains**, which are covered fully in Chapter 14.

Clock - internal or external

UNA can be the clock source, generating MIDI clock for synced gear, or it can follow an incoming clock from your DAW, drum machine, or modular system. The mode is set in **Menu > Clock & Sync**. (See Chapter 16).

Tempo can be set via the secondary function of PARAMETER knob 1; making it easily accessed in all Performance and Track modes.

Chapter 16 also covers transport messages - Start, Stop, Continue - and how UNA both responds to and emits them.

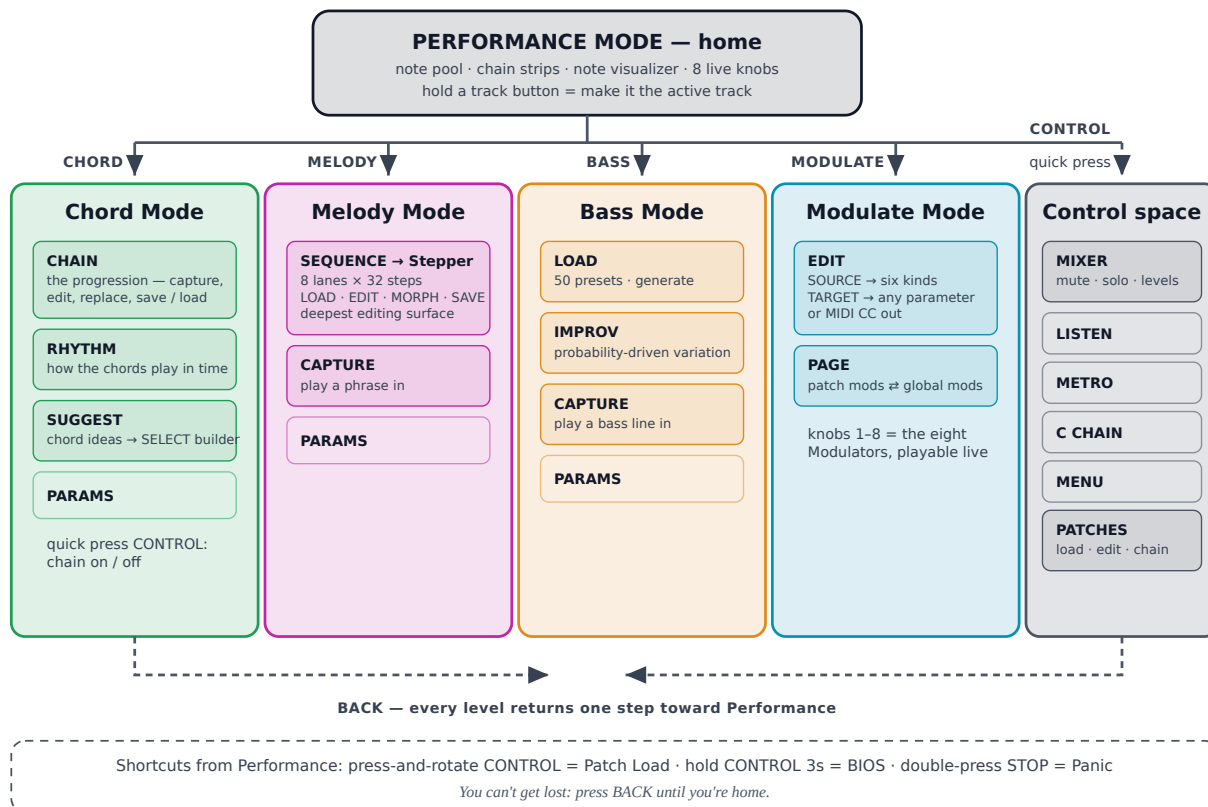
Chapter 6 - Performance Mode

UNA's main screen is **Performance Mode**, this is UNA's Hub.

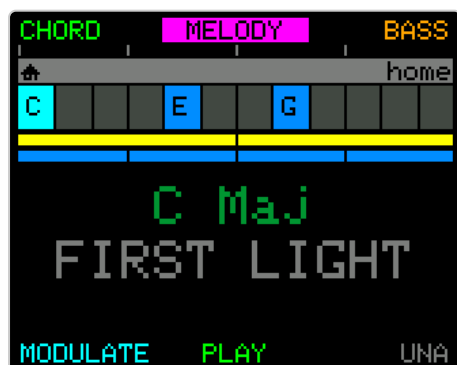
From here, a single button press will take you into any **Track** or **Modulation** mode.

Performance is home. Everything is one press away.

Modes are for editing — the music keeps playing in every one of them, and BACK always walks you toward home.



What's on the display



The Performance display is built around showing you, at a glance, what UNA is doing musically:

- **The Note Pool.** The wide strip across the top of the screen shows the **note pool** - the set of pitches that belong to the current chord. Every track draws its notes from this pool, so it's where harmony lives visually. The **root** note of the chord is highlighted - handy for orienting yourself in a progression, or for knowing what note to start a solo on. Played Chords appear as Green and Chord Chain Chords are Blue.
- **The Patch Chain strip.** The thin yellow bar underneath is your **Patch Chain** - the arrangement of patches UNA will play through in order (verse, chorus, bridge, and so on). Each block along the strip is one patch in the chain, and each block's width is proportional to how long that patch plays for - so a whole-song section is a wide block, a two-bar interlude is a narrow one. The block that's currently playing is highlighted brighter than the rest. A small marker creeps along the bottom edge of that block as it plays, showing you exactly where you are in it. When there's no Patch Chain running, the strip is hidden. Chapter 14 covers Patch Chains in full.
- **The Chord Chain strip.** The thin light-blue bar just below the Patch Chain strip works the same way but for chords: it's your **Chord Chain** - the progression of chords driving the harmony. Each block is one chord; each block's width is proportional to the chord's length in the progression. The currently playing chord is highlighted; the marker along the bottom shows where you are in it. When the chain is off (you're playing chords by hand instead of running the progression), the strip is hidden. Chapter 8 covers Chord Chains in full.

When moving to the next chord, the Note pool shifts to match, so you can see harmony in real time.

- **The Note Visualizer.** Shows output notes from all 3 tracks as a rising note animation.
- **Parameter Values.** The moment you move a PARAMETER Knob, the name and value are temporarily displayed.

Display views - Notes, Notes + Info, Notes + Info Extra

On top of everything above, you can choose how much extra information UNA overlays on the Performance screen. **Rotate the CONTROL Knob** (without pressing it) to cycle between three views.

- **Notes.** Just the note pool, the chain strips, and the note animation. Cleanest look.
- **Notes + Info** (default). Adds the **current chord name**, the **patch name**, and a small **G>C root** read-out (top-right): the note you played lowest, then the root UNA detected from the whole chord. How that root is chosen is set by **Root Note**, and which tracks follow it by **Root Note Tracks** (Chapter 17). The read-out only appears while Root Note detection is on - with it **OFF (Lowest)** the two are always the same note.
- **Notes + Info Extra.** Shows Chord, the root read-out, Tempo (BPM), Current Patch ("A1") , and Patch Name, for when you want everything on-screen at once.

Chord Names: If UNA can't put a name to the shape, it lists the notes instead.

Chord Detection

UNA identifies the current chord automatically. Its colour follows the same rule as the note pool: **blue** when the chord chain is driving the harmony, **green** when you're playing chords by hand.

The 6 CONTROL buttons

In Performance Mode, the six CONTROL buttons are assigned as:

CHORD	MELODY	BASS
MODULATE	PLAY / STOP	(unused)

The top-row buttons - **CHORD**, **MELODY**, **BASS** - are *track buttons*, and they work in two steps:

- **Press a track button whose track is not currently selected** - that track becomes the **active track**. You stay in Performance Mode; nothing else changes. The PARAMETER Knobs now target that track.
- **Press it again** - now that the track *is* selected, the same button opens that track's mode.

So switching which track your knobs are editing costs one press, and opening a track's mode costs two. Once a track is selected, a single press takes you straight into its mode - which is what you'll usually be doing once you've settled on a track.

How long you hold the button makes no difference - only the press counts.

The bottom-row buttons each have a single, immediate job:

- **MODULATE** - opens **Modulate Mode** (Chapter 12).
- **PLAY / STOP** - the transport control. (See below).

The bottom-right button does nothing functional. Performance is UNA's home - there is nowhere to go "back" to.

Play, Stop, and Panic Stop

The **PLAY / STOP** control starts and stops UNA's sequencer. Press to toggle.

Pressing Stop while UNA is playing does a clean stop: the sequencer stops, the music ends. Press again to Play. A short tap while the last notes are still playing out does nothing - wait for the tail to finish, or hold to Panic Stop (below).

Hold PLAY / STOP for about half a second and you trigger Panic Stop. That's UNA's nuclear option - the sequencer stops, every active note is silenced, and all-notes-off / all-sound-off are sent on every MIDI channel, clearing the whole output. Use it when a stuck note is hanging on a synth, something has gone sideways, or when you just want a clean slate. A hold always ends in a full stop, whatever UNA was doing.

You don't have to press Play. When UNA is stopped, holding a note or a chord on a connected keyboard starts the sequencer - that's **Live Play** (Chapter 5).

Release the keys and it stops. A sustain pedal latches it if you'd rather keep it running while you change chord.

The CONTROL Knob

The CONTROL Knob is how you reach the **Control space** (UNA's mixer and settings hub). It also doubles as a **modifier** for live parameter tweaks.

- **Quick press** (press and release, with nothing else touched) → opens the **Control space**. Press **BACK** or quick press the CONTROL Knob again to return to Performance mode.
- **Rotate** → cycle the Performance display between the three views. (*Notes, Notes and Info, Notes and Info+*).
- **Press and rotate** → jump straight to **Patch Load** (Chapter 14). This is the quick way to change patch without going through the Control space.
- **Hold and rotate a PARAM knob** → a *temporary* performance edit of that parameter: the value changes live while you hold, then snaps back to its stored value the moment you release CONTROL. Nothing is saved. (Covered below.)

The music keeps playing the whole time, in every case.

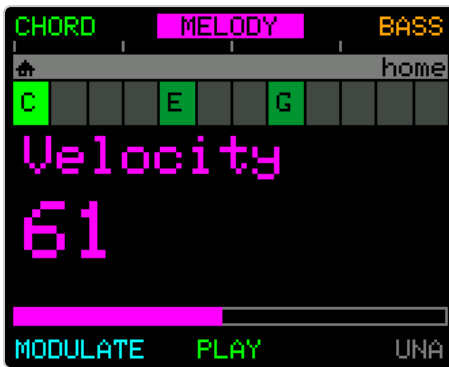
Active Track and the PARAMETER Knobs

The 8 PARAMETER Knobs are always live in Performance Mode. You can adjust parameters without entering a Track mode - just turn a knob and the change happens live.

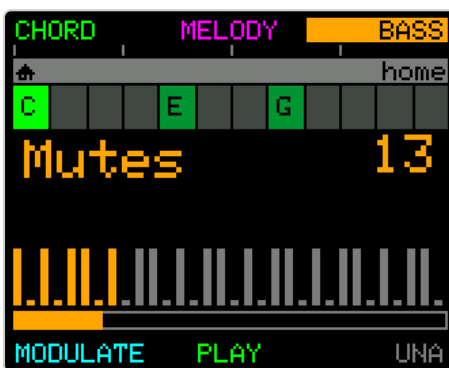
The PARAMETER knobs only target the **active track**. The track button LEDs show which track is currently active.

To change the active track, **press its track button - CHORD, MELODY, or BASS**. A press on a track that isn't already selected simply selects it. (Press the same button a second time to enter that track's mode.)

The display also tells you, by colour and parameter label, which track and which parameter you're changing as you turn a knob.



And remember the two parameter layers from Chapter 5: **rotate** a knob to change a primary parameter, **press and rotate** to change a secondary parameter. Every track exposes 16 parameters across the 8 knobs.



Temporary edits - push a parameter, then let it snap back

Sometimes you want to *push* a parameter for a moment and then have it spring straight back. For example, open the gate wide for a one-bar build, drop the velocity for a hushed passage, or lift the octave for a fill. To do this;

- **Hold the CONTROL Knob and rotate a PARAMETER Knob:** the value moves live, the music responds immediately, and the instant you release the CONTROL Knob it snaps back to where it was.

Nothing is written - your patch keeps its original value. This is a *performance* gesture, not an edit: the non-destructive way to be expressive over a part you've already dialled in.

A few things worth knowing:

- It works on **both layers** - hold CONTROL and **rotate** for a primary parameter, hold CONTROL and **press-and-rotate** for a secondary.
- You can hold **several knobs at once**; every temporary change snaps back together when you release CONTROL.
- Temporary values display in **yellow**, so you can always tell a held edit from a committed one.
- **Tempo is the exception.** Because tempo is a single device-wide value, not part of the patch, changing it always sticks, even under CONTROL.

The same gesture is available inside Chord, Melody, and Bass Modes, and in Modulate Mode it temporarily rides a modulator's **amount** (Chapter 12).

Targeted edits - dial a parameter, then let it land

There's a mirror-image gesture to Temporary edits, for when you want to *aim* at a new value carefully before committing to it. Instead of cycling a parameter through all its intermediate values, you dial it into a new position and let it lock in.

- **Hold a PARAMETER Knob and rotate the CONTROL Knob:** the on screen value changes, but the music only responds at the moment you release the PARAMETER Knob; at which point the new value is committed to the patch.

A few things worth knowing:

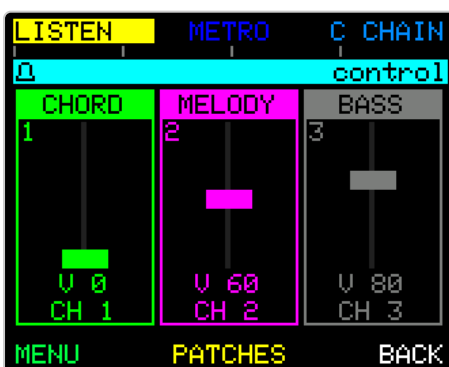
- It works on **both layers** - hold the PARAMETER Knob and rotate the CONTROL Knob for a primary parameter, or hold the PARAMETER Knob and *press-and-rotate* the CONTROL Knob for a secondary.
- Staged values display in **purple**
- Rotating past a value briefly doesn't lock it - commit only happens when you **release the PARAMETER Knob**.
- **Play/Stop or a Panic Stop abandons a staged edit** - the value doesn't commit if you interrupt with a button press before releasing the knob.

The same gesture is available inside Chord, Melody, and Bass Modes.

The Control Space - Mixer, Patches, and Settings

The Control space is UNA's **mixer** (controlling which tracks you hear, how loud, and where they're routed). It is also the launchpad to the **Patches Mode**, **Metronome**, the **Listen** toggle, **Chord Chain** toggle, and the **Menu**.

The mixer - three track sliders



The page shows three vertical sliders side by side - **Chord (1)**, **Melody (2)**, and **Bass (3)**, left to right. Each is drawn in its track colour, with the track name across the top and its number at the slider's top-left. The slider's height is that track's **velocity**; its **MIDI channel** is shown just below. A **muted** track is drawn in grey.

You mix with **PARAMETER Knobs 1, 2 & 3** - Knob 1 = Chord, Knob 2 = Melody, Knob 3 = Bass:

- **Press** → **mute / unmute** that track.
- **Rotate** → change that track's **velocity** (the slider moves).
- **Press and rotate** → change that track's **MIDI channel**.

Additional "performance" gestures are available on the knobs in the Control space:

- **Hold the CONTROL Knob and press a PARAMETER knob** to **solo** that track (press again to un-solo)
- **Hold the CONTROL Knob and rotate a PARAMETER knob** for a *temporary* velocity change that snaps back when you let go.
- **Hold the CONTROL Knob and press and rotate a PARAMETER knob** for a *temporary* channel change that snaps back when you let go.
- **Hold a PARAMETER Knob and rotate the CONTROL knob** for a targeted velocity change that only jumps to the new value when you let go.
- **Hold the PARAMETER Knob and press and rotate a CONTROL knob** for a targeted channel change that only jumps to the new value when you let go.

Where mutes are stored. By default, mutes are device-wide: mute the Bass Track and it stays muted as you switch patches. If you'd rather each patch remember its own mutes, change **Menu > CONFIG > Track Mutes** from *Global* to *Per Patch* (Chapter 17).

The Controls

The Control space is a single hub, with the 6 CONTROL buttons assigned as:

LISTEN	METRO	C CHAIN
MENU	PATCHES	BACK

- **LISTEN** - toggles the **Listen** behaviour (Chapter 5).
- **METRO** - opens the **Metronome** page (time signature, click, volume). Documented below.
- **C CHAIN** - toggles the chord chain on/off (the same chain described above and in Chapter 8).
- **MENU** - opens the device-wide **Menu** (MIDI routing, keyboard split, LED brightness, all globals). Documented below.

- **PATCHES** - opens the **Patch Load** screen. (You can also browse patches by **rotating the CONTROL Knob** while in the Control space.)
- **BACK** - returns to the mode you came from.

The **LISTEN, METRO and C CHAIN** controls **light up when they're on** - the label highlights and its LED glows (Listen = yellow, Metro = magenta, Chain = cyan). The lights track the *live* state, so they update even when something else changes the setting. In particular, **playing a chord on a connected keyboard exits the chord chain**, and you'll see the C CHAIN light go out the moment it does.

Menu

The **Menu** is where UNA's device-wide settings live - everything that isn't part of a patch. MIDI routing, keyboard split, playback behaviour, and so on. These settings persist as you switch patches.

The top-level menu splits into three categories:

Function	Category	What lives here
MIDI	Routing & sync	Clock and Transport, input/output channels, Thru, per-port routing, keyboard split, Loop Protection.
CONFIG	Playback & feel	Velocity sensitivity, accents, time sort order, solo output and pitch quantize, Live Play, where track mutes are stored, patch-chain behaviour.
HELP	On-device reference	Reference info and firmware version.

Press the corresponding control to drop into a category, then use the **PARAMETER Knobs** and **CONTROL Knob** to navigate within it. **BACK** returns up one level - out of a sub-page, then out of the Menu altogether and back to the Control space. (From the Control space itself, a single **CONTROL-Knob** quick press returns you to Performance.)

A few useful things to know:

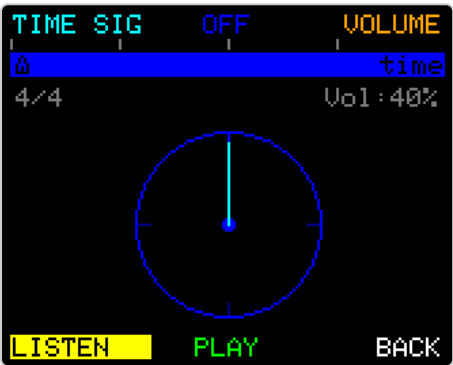
- **Menu edits are immediate and persistent.** As soon as you change a value, it's saved. You don't have to confirm or "save settings."
 - **The music keeps playing.** You can enter the Menu mid-performance and change a MIDI routing or split point without stopping the sequencer. The transport runs underneath the Menu like it does in any other mode.
 - **Menu settings are not patch state.** Loading a new patch will not change what's in the Menu. The full reference for every Menu setting is in Chapter 17.
-

Metronome

UNA's **Metronome** page is where you set the things that govern musical time - time signature, the audible click, click volume - and where you see the bar position visualised as a sweeping clock hand. If you're tracking to a click, recording in time, or wiring UNA into a rig where the time signature matters, this is the page you'll come back to.

You reach the Metronome page **from the Control space**: quick press the CONTROL Knob to open the Control space, then press **METRO**.

What's on the page



A clock face fills the centre of the screen. The hand sweeps once per bar - at a glance you can see how far through the bar UNA currently is, and the beat tick marks show you where the divisions fall for the current time signature. The header shows the **time signature** on the left and the **click volume** on the right.

The controls

Function	What it does
TIME SIG	Selects the time signature for editing. Once selected, rotate the CONTROL Knob to step through the available signatures (4/4, 3/4, 2/4, 6/8). Press again to deselect.
ON / OFF	Toggles the click on or off. Lights up when the click is on.
VOLUME	Selects the click volume for editing. Once selected, rotate the CONTROL Knob to set the level (1-100%). Press again to deselect.
BACK	Returns to the Control space, with all changes already applied.

The pattern is the same for TIME SIG and VOLUME: press to "arm" the setting, rotate the CONTROL Knob to change it, press again (or press a different setting's control) to step out.

A note on tempo

The Metronome page is about the *time signature and the click*, not tempo. Tempo lives on **PARAMETER Knob 1** as its secondary parameter - press and rotate Knob 1 to change BPM from any performance or track mode. Chapter 13 covers tempo, time signatures, and the metronome click in detail.

Loading Patches

From Performance mode, press and hold the **CONTROL Knob**, then rotate it, and you're in **Patch Load** mode.

The display shows a **4×2 grid** of the 8 patches in the current bank - each cell tagged (A1, A2, ...) with its name. The currently-loaded patch is highlighted; the selected patch (the one you'd **APPLY** next) has a white border.

To pick a different patch, either **rotate the CONTROL Knob** to walk the grid, or **press a PARAMETER Knob (1-8)** to jump directly to that slot. Press **APPLY** to load the highlighted patch. If it's in the same bank as what's currently loaded, the transition is seamless - the new patch enters at the same step/tick the old one was on, so the audience hears a clean crossover.

For fast in-bank switching without touching **APPLY**, hold **CONTROL** and press a **PARAMETER Knob** - that quick-loads the patch under the knob instantly.

Switching banks takes a moment: press **BANK** to engage bank-select, rotate **CONTROL** to pick the new bank, then select the patch and press **APPLY**.

Cross-bank loads stop playback because the whole bank has to move into RAM - **UNA** warns you before doing this.

Press **CANCEL** to leave Patch Load without changing anything. If you're already sitting on the active patch, **CANCEL** reads as **BACK** - nothing to cancel.

TIP: For full control over banks and patches, including backups, move and copy, and sharing. See **Midicake CONNECT**

Chapter 14 has the full reference on banks, editing, copying, and renaming.

Some patterns to try

Here are a few worked recipes that show how Performance Mode flows in real use.

The "warm-up" pattern. Power on UNA, plug a keyboard into the MIDI In, plug your synth into MIDI Out A. Play a few notes - UNA runs whatever patch is loaded. Toggle Listen on, play some chord shapes, watch the note pool shift on the display as UNA follows you. When you hear something you like, turn Listen off; UNA locks to that progression, and now you can solo over the top.

The "switch patches mid-song" pattern. You're playing a verse patch. The chorus is approaching. Press and hold the CONTROL Knob and rotate - you're in Patch Load. Highlight your chorus patch (rotate CONTROL, or press its PARAMETER Knob). At the right moment, press APPLY. UNA crosses over seamlessly; the audience hears the chorus arrive without a glitch. Even faster: hold CONTROL and press the PARAMETER Knob for the chorus slot - patch loads instantly without an APPLY step. Both work only within the current bank - but a set list should live in one bank anyway.

The "drop the band" pattern. During a verse, press the CONTROL Knob to enter the Control space. Press PARAMETER Knob 1 to mute the Chord Track - the chords go silent, but the chord chain still drives the melody underneath. The "band" has dropped out, but the melody continues, harmonically locked to the silent progression. Press Knob 1 again, the chords come back.

The "panic" pattern. A stuck note is droning. Or a chord is ringing on a synth's hold pedal. Or your fingers caught something they shouldn't have. Double-press Stop. Everything stops.

What's next

Chapter 7 is the parameter reference - reach for it when you want to know what any parameter does. The actual editing of the music happens in the dedicated Track modes: Chapter 8 covers Chord Mode, Chapter 9 Melody Mode, Chapter 11 Bass Mode. Each is a deeper dive into a track you've already been hearing.

If you want a one-page reference to everything you've just read, Appendix F has the complete per-mode control-and-knob table.

Chapter 7 - Track Parameters

Every track (Chord, Melody, Bass) exposes the same set of parameters. This chapter is the reference for what each one does.

You've already met these parameters in passing in Performance Mode (Chapter 6), where the **PARAMETER** Knobs drive the active track's parameters live. This chapter goes deeper: every parameter, what it controls, its range, and any track-specific quirks you should know about.

The mode chapters that follow - Chord (Chapter 8), Melody (Chapter 9), and Bass (Chapter 11) - each introduce their track's **PARAMS** menu; when a parameter needs more detail, they refer you back here.

How to reach the parameters

There are two ways to change any parameter on any track.

- **Live edits - the **PARAMETER** Knobs.** When a track is active (Chord mode, Melody mode, or Bass mode; or via the active track in Performance mode), the 8 **PARAMETER** Knobs each expose two parameters - a **primary** on **rotate** and a **secondary** on **press-and-rotate**.
- **The **PARAMS** menu.** From any mode, press **PARAMS** to open the full parameter list. Grouped into categories, you can select parameters with the **CONTROL** Knob, then **press-and-rotate** **CONTROL** to change values.

Useful shortcuts

- Press a **PARAMETER** knob to jump the highlight straight to that knob's primary parameter
- Press and hold **CONTROL** and press a **PARAMETER** knob for the secondary parameter.



Every parameter lives here, including toggle-style items that don't sit on a knob directly.

Inside PARAMS - the button controls

Track Params mode has 5 CONTROL buttons assigned as:

RESET		LOCK/UNLOCK
CATEGORY	PLAY/STOP	BACK

RESET

Restores parameter defaults at one of two scopes: just the currently selected parameter, or the whole track.



Pressing **RESET** show a confirmation screen where you pick the reset scope.

- **PARAM** - resets just the currently-highlighted parameter to its default. Useful when you've dialled something into an odd corner and want a quick undo without losing the rest of your work.
- **TRACK** - resets *every* parameter on the current track to its factory defaults. A hard reset of the whole track's parameter set. (Not including LOCKED parameters, see below.)
- **YES** - commit the reset with the chosen scope.
- **CANCEL** - back out without changing anything.

LOCK / UNLOCK

Toggles a lock on the currently-selected parameter. When locked, live edits from the PARAMETER Knobs are ignored - you can't accidentally shift the locked value mid-performance by brushing a knob.

Locked parameters show a small lock icon next to their value in the list. Press LOCK again to unlock.

LOCK is only available for the **Primary and Secondary parameters**.

CATEGORY

Jumps between the parameter categories, saving you the scroll. There are two methods:

- **Quick press CATEGORY** - jumps the selection to the first parameter of the *next* category.
- **Hold CATEGORY and rotate the CONTROL Knob** - cycles through categories in either direction.

Combined with the PARAMETER Knob shortcut for jumping to individual parameters, CATEGORY makes it fast to move around large parameter lists without scrolling item-by-item.

PLAY / STOP

The transport, same as everywhere else. Toggles the sequencer so you can hear parameter changes without leaving PARAMS.

BACK

Returns to the parent mode. Any changes you made are already saved.

The Categories

Parameters are organised into three main categories, in this order:

- **PRIMARY** - parameters that affect **individual notes and steps**. This includes the 8 primaries (Pitch, Gate, Velocity, Slice, Octave, Channel, Delay, Layers) plus a few directly related parameters.
- **SECONDARY** - parameters that affect the **sequence as a whole**. The 7 knob secondaries (Steps, Rotate, Jump, Direction, Time, Mutes, Accents).

- **LOCKS** - three "override" parameters that pin the track's voicing against the live chord. Covered in Chapter 8; briefly recapped below.

Plus, on the Melody Track, an additional **STEPPER** family (one per primary parameter) that Chapter 10 covers in depth.

Knob map

Knob	Primary (rotate)	Secondary (press-and-rotate)
1	OCTAVE	Tempo (<i>global; not per-track</i>)
2	CHANNEL	STEPS
3	DELAY	ROTATE
4	LAYERS	JUMP
5	PITCH	DIRECTION
6	GATE	TIME
7	VELOCITY	MUTES
8	SLICE	ACCENTS

Tempo is a device-wide setting rather than a track parameter; changing it always sticks. See Chapter 13.

Primary parameters - the note shapers

These are the parameters you reach for when you want to change *how notes sound* - pitch, timing, volume, layering. Eight of them live on the PARAMETER Knobs' primary layer:

PITCH

The scale degree offset for each played note, relative to the current chord's root. Range: **-8 to +8** (0 = root of the chord).

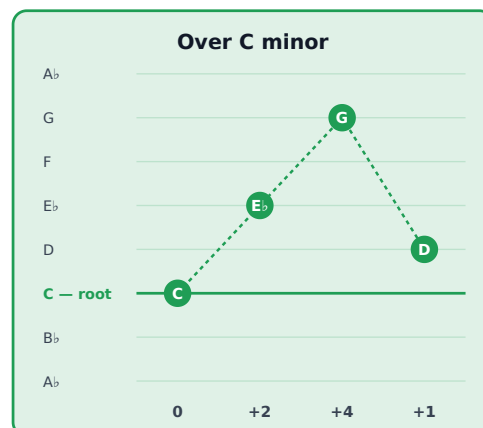
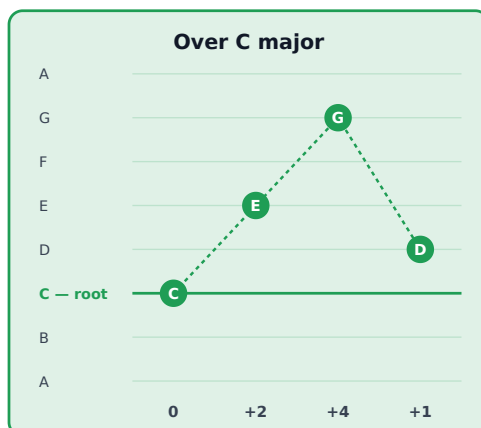
Positive values move the note up the scale; negative values move it down. Combined with the chord chain, PITCH is how the Melody Track walks a musical line up and down a chord progression while staying in key.

PITCH counts scale steps, not semitones

0 is the root of the current chord. +2 means "two scale steps up from wherever the root is now." That's why melodies never leave the key.

THE OFFSET

+5
+4
+3
+2
+1
0 = chord root
-1
-2
full range -8 ... +8



Same four numbers, same shape — but E becomes Eb. Even changing only the chord's quality re-spells the melody, always in key.

WHERE THIS NUMBER LIVES

The **PITCH parameter** (Knob 5) offsets every note the track plays. The **Pitch Stepper lane** gives each step its own offset — that per-step ladder of numbers **is** your tune.

Semitones only enter the picture via OCTAVE (± 12 per step on the Octave lane) — everything else thinks in scale steps.

Default: **0** (root).

GATE

Note length, expressed as a fraction of the step's total duration. Range: **1 Tick to 2 Bars**.

At the low end, notes are short staccato stabs; at the high end, notes ring across their whole step and overlap into the next. GATE is the parameter that gives a phrase its articulation.

Default: **7 Ticks**.

VELOCITY

How loudly a note plays, on the standard MIDI 0–127 scale.

Applies to every note the track produces. If you want per-step variation, use the Velocity Stepper (Chapter 10) or a Modulator (Chapter 12) targeting VELOCITY.

If you want the incoming velocity you played on your keyboard to reach UNA's output, turn on Velocity Sensitivity in Menu > CONFIG (Chapter 17).

Default: **60**.

SLICE

Divides a step into sub-steps ("slices") to create sub-divisions. Range: **0–4** (0 = off, no slicing; higher values = more slices per step).

The way each slice sounds is controlled by the **SLICE TYPE** parameter (below).

Default: **0** (no slicing).

OCTAVE

Vertical position of the track's notes, expressed as an offset from the natural octave. Range: **–3 to +3**.

At 0, the track plays around C3; positive values move it up, negative down.

The exact octave a note lands in depends on the current chord's root plus this offset - unless **LOCK OCTAVE** is on (see Locks below), in which case OCTAVE fully controls vertical position.

Default: **0** (C3).

CHANNEL

Which MIDI channel the track transmits on. Range: **1–16**.

Each track has an independent MIDI channel, so you can route them to different synths in your rig (Chapter 15).

Defaults: **1** (Chord), **2** (Melody), **3** (Bass).

Where channels are stored. By default each patch stores its own channels. If **Menu > CONFIG > Track Channels** is set to *Global* (Chapter 17), the three channels are device-wide instead: editing CHANNEL changes the shared channel for that track, and the value stored in the patch is left untouched.

DELAY

A per-step timing offset that pushes the track's notes forward or back in time, applied according to the **DELAY TYPE** parameter (below). Range: **0–99%**.

At 0 there is no offset; higher values delay more. It's useful when combining with other tracks to create alternating beats.

Combine with DELAY TYPE = SWING for a swing feel; leave at ALL for a straight offset, pushing all notes back.

Default: **0%**.

LAYERS

How many notes the track plays at once, drawn from the current chord. Range: **1-4**.

At 1, a single-note line is played (typical for Melody and Bass). Higher values add stacked notes - useful for octave doubling on Bass or for beefier melody lines.

Default: **1**.

The **Chord Track** has an "**As Played**" that matches the layers to the number of notes in the chord. So if you press 10 keys, a 10 note chord will be heard.

Additional "Behaviour" Parameters

These parameters live in the PRIMARY group in the PARAMS menu but don't sit on a PARAMETER Knob directly.

MODE (*Chord Track only*)

Toggles the Chord Track between **CHORD** (rhythmic) and **DRONE** (sustained pad). Chapter 8 covers the full behaviour of both.

Values: **CHORD** (default), **DRONE**.

On the Melody and Bass tracks, MODE is disabled.

VOICE MODE

Sets whether the track voices notes polyphonically or monophonically.

- **POLY** (default) - multiple notes can overlap. Standard behaviour, good for pads, melodies, and lines that use LAYERS.
- **MONO** - only one note at a time; a new note-on cuts the previous note off. Good for classic mono synth leads and basslines where you want each note to bite cleanly.

DELAY TYPE

Controls how the DELAY value is applied across the sequence.

- **ALL** - DELAY nudges every step by the same amount.
- **SWING** (default) - DELAY offsets only the even-numbered steps (steps 2, 4, 6...), giving a swing feel. The higher the DELAY, the more shuffled the pattern.

SLICE TYPE

When the SLICE value is greater than 0, SLICE TYPE picks which subdivision behaviour is used. Range: one of several ornament algorithms (Chops, strums, ratchets, and trills).

Default: **CHOP**.

Slice: one note, four ornaments

SLICE divides a step into sub-steps. SLICE TYPE decides what those sub-steps do. Here: one step, SLICE = 3 (four pieces).

THE STEP AS PLAYED — SLICE = 0



one note, its full gate length

SLICE = 3
→

CHOP — the default



The note is cut into equal retriggered pieces — a clean stutter on one pitch.

STRUM



The step's stacked notes enter one after another, low to high — a guitarist's strum across the chord.

RATCHET



Fast, insistent retriggers packed tight — the drum-roll of the melody world. Drama on demand.

TRILL



The pieces alternate between the note and its upper neighbour — a classical trill, in the scale.

SLICE (0-4) sets how many subdivisions · SLICE TYPE picks the ornament · per-step values live on the Slice Stepper lane (Ch 10)

Secondary parameters - the sequence shapers

Where primary parameters affect individual steps, secondary parameters affect the **whole sequence** - its length, order, rhythm pattern, and speed. All seven live on the PARAMETER Knobs' secondary layer (press-and-rotate).

STEPS

The length of the track's sequence, in steps. Range: **1-32**.

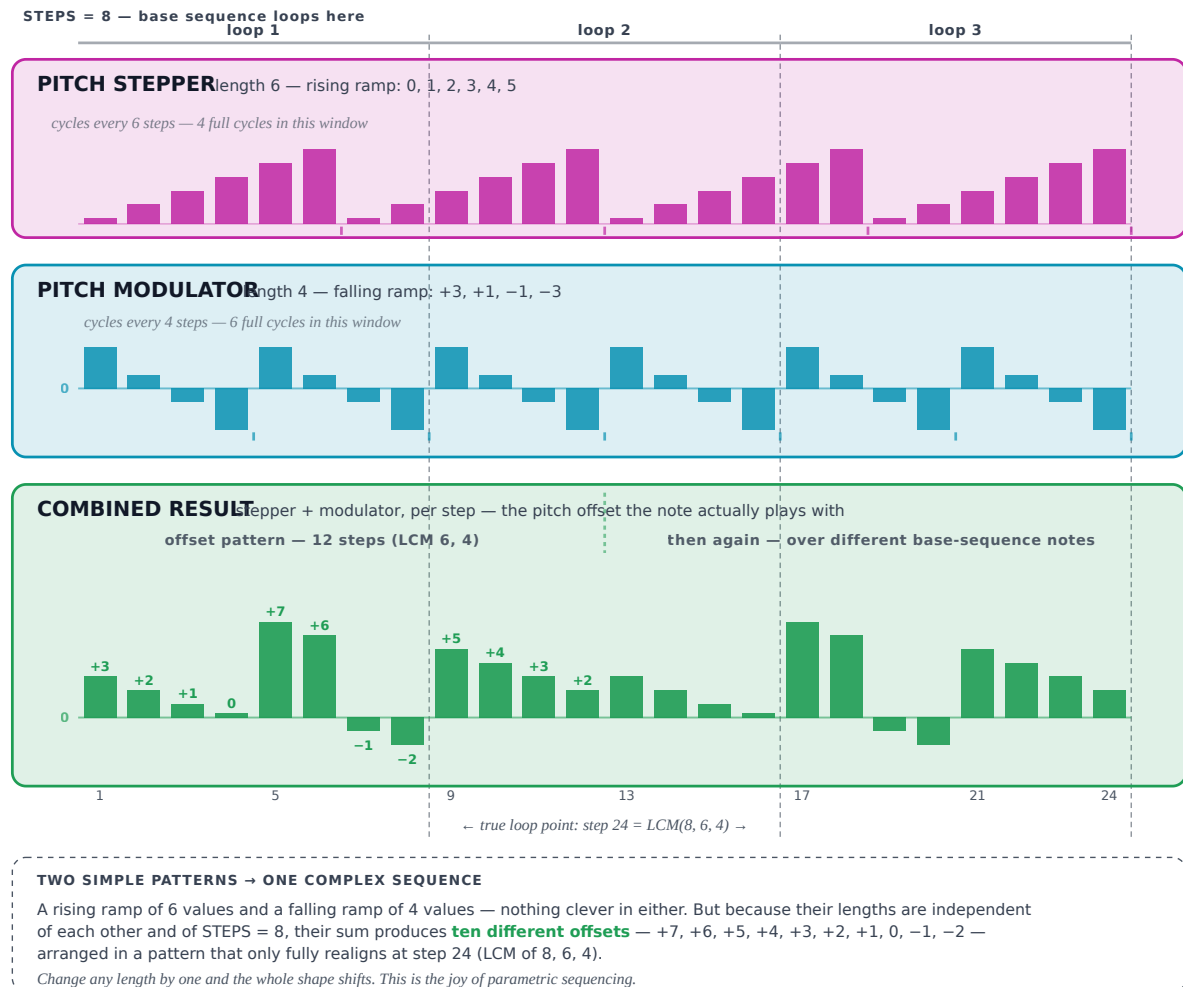
Default: **4**.

Combined with the TIME parameter, this decides how long a full loop lasts. Shorter STEPS with a fast TIME gives a busy, repetitive loop; longer STEPS with a slow TIME gives a spread-out, breathing part.

It's worth noting that STEPS doesn't limit the length of the whole sequence, just the length of the basic sequence, the true sequence length (i.e. before it repeats) can depend on other factors, such as modulators, or independent lengths of the individual Stepper patterns. Independent pattern lengths means that patterns will repeat at different points, creating much longer sequences. This is the joy of parametric sequencing.

Independent pattern lengths — two simple patterns, one complex sequence

A pitch stepper (length 6) and a pitch modulator (length 4), applied over a base sequence of STEPS = 8.



Chord Track quirk: default is **32** - the Chord Track's STEPS defines the length of the rhythmic pattern used for Mutes and Accents.

ROTATE

Shifts the whole step pattern forwards or backwards without changing its content. Range: **0–32**. At 0, no rotation; higher values move step 1 further into the sequence. Useful for landing a pattern's downbeat on a different beat of the bar.

Default: **0**.

JUMP

Skips through the sequence in jumps rather than one step at a time. Range: **1–3**. At 1, plays every step in order; at 2, plays every other step; at 3, every third. Combines with DIRECTION for polyrhythm-style walks.

Default: **1** (no jump). **Chord Track quirk:** locked to 1.

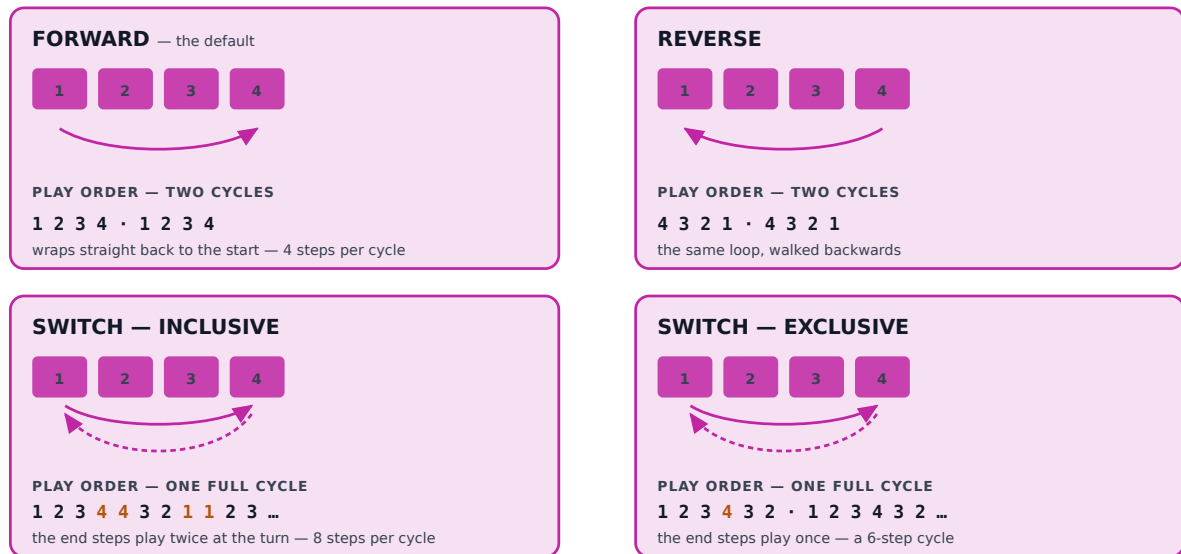
DIRECTION

The order steps play in. Range of options: **Forward**, **Reverse**, **Switch Inclusive**, **Switch Exclusive**.

Forward is the natural order (1, 2, 3...); reverse plays backwards; Switch plays forwards then backward, repeating the end notes (inclusive) or not (exclusive).

Direction: which way the steps play

The same 4-step sequence, four ways round. The subtle one is Switch: inclusive repeats the end steps, exclusive doesn't.



Combine with JUMP (skip every 2nd or 3rd step) for stranger walks — and note the Chord Track is locked to Forward.

Default: **forward**.

Disabled for **Chord Track**, locked to forward.

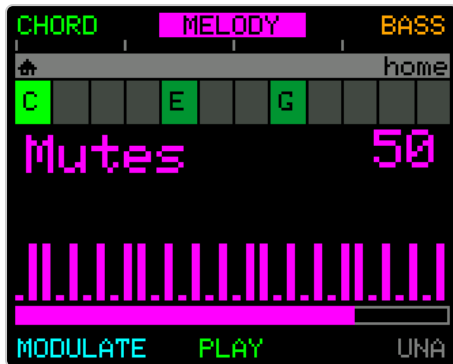
TIME

How long each step lasts, expressed as a musical duration (1/16, 1/8, dotted eighth, 1/4, and so on). This is the single biggest control over how fast your track plays.

Together with STEPS, it decides the total length of a loop. Different values on different tracks give you polyrhythms without doing anything else.

Default: **8 (notes per bar)**.

MUTES



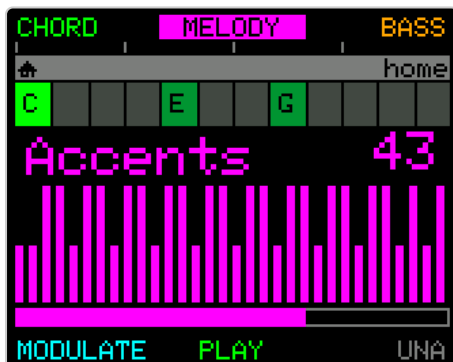
A 32-step Euclidean **mute pattern** that decides which steps of the sequence *don't* play - silencing chosen steps to shape a rhythm.

Range: **0–64** patterns.

When you rotate MUTES, a live preview of the pattern appears on-screen: 32 small bars, each either tall (playing) or short (muted). Combined with STEPS and ACCENTS, it's one way to turn a sequence of notes into a *groove*.

Default: **0** (all steps play).

ACCENTS



A 32-step Euclidean **accent pattern** that decides which steps of the sequence play *louder* - the opposite twin of MUTES.

Range: **0–64** patterns.

Same live-preview visualisation: 32 small bars, taller ones = accented steps.

The **Accents Amount** Global (Chapter 17) sets how much louder an accented step is compared to normal.

Default: **0** (no accents).

LOCKS - the override layer

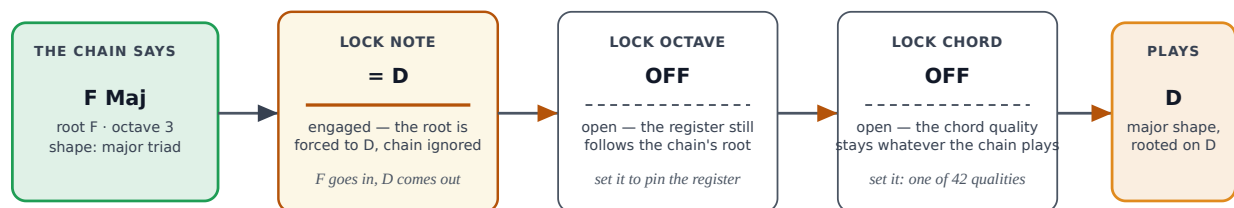
Three "override" parameters that pin the track's voicing against whatever chord is playing:

- **LOCK OCTAVE** - fixes the octave to whatever OCTAVE is set to, ignoring the live chord's octave (root).
- **LOCK NOTE** - overrides the root pitch class. Values: **OFF** (default), **C-B** (pick one of the 12 semitones).
- **LOCK CHORD** - overrides the chord's intervals. One of 42 chord qualities (Major, Minor, 7th, 9th, sus4, dim, etc.). Same list as Chord Select.

All three default to **OFF** and reset to OFF on a fresh capture so recorded material plays back uncoloured. Locks are used for compositional tricks like pedal points (**LOCK NOTE**), forced octave range (**LOCK OCTAVE**), or "every chord plays as augmented" (**LOCK CHORD**).

Locks: the chain proposes, the track disposes

Three override gates sit between the chord chain and each track. OFF = pass through. Set = that aspect is pinned, whatever the chain says.



The chain walks F → C → G → Am, but this track stays anchored on D the whole time — an instant "Pachelbel" pedal point.

ONE TRICK PER LOCK

LOCK NOTE — the pedal point. Every chord becomes a pedal on the note you pick. The harmony moves above a fixed bass.

LOCK OCTAVE — the fixed register. The track stops following the chord's octave and stays where you put it — basses that stay low, leads that stay high, whatever inversion the chain wanders through.

LOCK CHORD — the forced colour. Every chord plays as the quality you choose. "Everything is a major 7th" turns any progression instantly Steely Dan; "everything is minor" darkens a whole song with one setting.

SCOPE & SAFETY

Locks are **per track** — Chord, Melody and Bass each carry their own three, so the bass can pedal on D while the melody roams free.

All three reset to OFF when you capture fresh material, so a new take always plays back uncoloured.

STEPPER parameters (*Melody Track only*)

Each of the 8 primary knob parameters (Pitch, Gate, Velocity, Slice, Octave, Channel, Delay, Layers) has its own **Stepper** - a 32-step lane of per-step values.

Chapter 10 is the deep dive on the Stepper: how to edit, morph, load, save, and shape each lane.

The Stepper appears in the PARAMS menu as a group per parameter (**PITCH STEPPER**, **GATE STEPPER**, etc.), each containing:

- **LENGTH** - the number of active steps in this lane.
- **ROTATION** - shift the lane forwards or backwards.
- **MORPH AMOUNT** / **MORPH FREQ** - wave-based transformation of the lane values.
- **SHAPE RANGE** / **SHAPE INVERT** - scale and invert the morphed values.
- **FLT EUCLID** / **FLT DEVIATE** - Euclidean thinning and randomised deviation.
- **ACTIVE** - turn this lane on or off without losing its values.

If you're editing individual step values, you'll almost always do it from the Stepper's own EDIT sub-mode rather than this parameter menu - but the menu is here for when you want to tweak a lane's overall shape.

Cross-references

- **Chapter 5** - Core Concepts: the mental model behind primary/secondary and how parameters relate to tracks.
- **Chapter 6** - Performance Mode: the PARAMETER Knobs in live use; Temporary and Targeted edits.
- **Chapter 8** - Chord Mode: full LOCKS deep dive; MODE (CHORD/DRONE); Chord Track-specific parameter behaviour.
- **Chapter 9** - Melody Mode: the Melody Track's PARAMS entry point.
- **Chapter 10** - The Stepper: per-step editing on the Melody Track.
- **Chapter 11** - Bass Mode: the Bass Track's PARAMS entry point plus IMPROV parameters.
- **Chapter 12** - Modulate: how Modulators target any parameter to evolve it over time.

The tracks

Chapter 8 - Chord Mode



Chord Mode is where you build, capture, and shape the harmony that drives everything else. - The chord chain (progression) creates the harmony across all tracks. - The chord rhythm provides the structure for the Chord Track.

The **Chord Track** itself aims to provide padding for your music, in the form of a rhythmic chord pattern or drone.

Getting in and out

From Performance Mode, press **CHORD** to enter Chord Mode. If Chord isn't already the active track, the first press selects it and a second press opens the mode (Chapter 6).

CHAIN	RHYTHM	PARAMS
SUGGEST	PLAY / STOP	BACK

Press **BACK** at any time to return to Performance. The sequencer keeps playing throughout - Chord Mode is for editing, not for stopping.

A note before you dive in: most of what's interesting in Chord Mode lives in one of two sub-systems - the **chord chain** (the progression of chords) and the **chord rhythm** (how those chords play out in time).

The Chord Chain

The **chord chain** is your harmonic timeline - the sequence of chords UNA cycles through as it plays. Build it, capture it from your keyboard, edit it link-by-link, save it, load it from a library. Each link in the chain has a *chord* and a *duration*; together they form the progression every other track will follow.

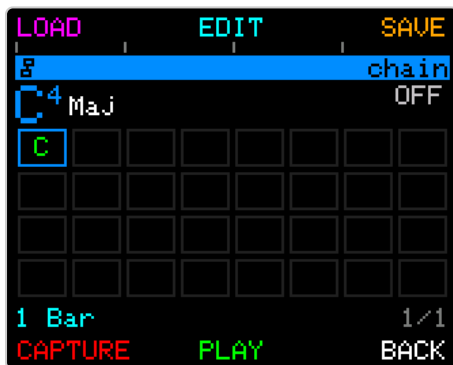


While you're in Chord Mode, the active chord chain is drawn as a blue horizontal strip across the top of the screen. Two details make it readable at a glance:

- **Links are sized by length.** Each link's width is proportional to its musical duration.
- **A playback marker tracks your position.** As the chain plays, the current playhead position is shown moving across the chain strip.

Press **CHAIN** to enter Chain Mode

The Chord Chain display



In Chain Mode the whole screen becomes a chain editor. What you see:

- **The chain grid** - a **4 × 8 grid of 32 links** filling the middle of the screen. Each link in your chain shows its **root note** colour-coded by chord quality (major, minor, sevenths, and so on); unused links sit as dim, empty cells. The **selected** and **currently playing** links are highlighted.
- **The link details** of the selected link are shown above the grid. The **root note**, **octave number**, chord name** (Maj, min 7, sus4, and so on), and an inversion tag (1st inv, 2nd inv).
- An **ON / OFF** label at the top-right tells you whether the chain is currently driving the music.
- The selected link's **duration**, and **position** in the footer.

Rotate the CONTROL Knob to walk through the grid slot by slot; the card and footer update as you go.

Function	What it does
LOAD	Open the saved-chain library and pick one.
EDIT	Open Chain Edit Mode (length, link timing, swap a chord).
SAVE	Save the current chain to the library.
CAPTURE	Open Chain Capture Mode - capture a chain from MIDI input.
PLAY / STOP	Transport control.
BACK	Return to Chord Mode.

The **CONTROL** Knob in Chain Mode scrolls through the chain's links so you can see each chord's details. Each link is a chord; the screen shows the chord name and the link's duration in bars and beats.

Toggling the chain

Quick press the **CONTROL knob** to enable or disable the chain.

When disabled, the current chord plays continuously. Unless overridden from an external keyboard, this will be the last chord heard.

Capturing a chord chain from your keyboard



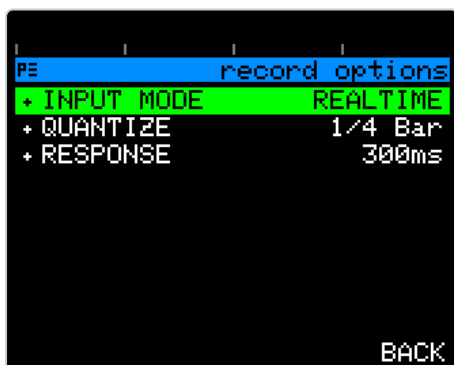
Capture is the fastest way to get a progression into UNA. Press **CAPTURE** inside Chain Mode and you're in **Chain Record**.

The screen controls:

Function	What it does
QUANTIZE	Quick-edit the snapping grid: press to select, rotate the CONTROL Knob to choose (e.g. ¼ bar, ½ bar). Each chord-change you play lands on the nearest grid line. Locked once recording starts. Capture also support Step Recording, in which case Quantize is labelled as TIME , which sets the length of each captured link.)
METRO	Toggles the metronome click during capture. Lights when on.
OPTIONS	Opens the Record Options mode (see below). Becomes UNDO during a step record.
ARM	Primes the capture. The label then walks through the take: START , WAIT during a count-in, END while recording, DONE when finished.
PLAY / STOP	Audition the existing chain before you record. Available before the take only.
CANCEL	Back out without writing anything. (Reads BACK before you arm.)

Record Options

Press **OPTIONS** to open the Record Options mode. Navigate the list with the CONTROL Knob, change a value by holding and rotating CONTROL, and press **BACK** to return to the Record screen.



The options are:

- **INPUT MODE**
- **REALTIME** - the default: play the progression live and it's recorded against the clock.
- **STEP REC** - (step record) add links to the chain one chord at a time; see below.
- **QUANTIZE** - the same snapping grid available as the QUANTIZE shortcut on the main Record screen. In Step Record this row is relabelled **TIME**, because it sets each new link's length rather than a snapping grid.
- **RESPONSE** - the note settle window (default **300ms**). This can help tolerate fingers landing slightly out of sync; and be tuned to your playing.

Realtime capture

With **INPUT MODE = REALTIME**:

- press **ARM** to prime
- then either press **START** (for a 1-bar count in) or simply play your first chord - the moment notes arrive, UNA starts recording.
- Play the chord of your progression.
- While recording, a **live bar counter** appears on the screen so you can see how many bars your chain has grown to as you play.
- Press **END** to finish the capture.

The new chain becomes active immediately.

- **CANCEL** backs out at any point.

With METRO on, you get a count-in. Pressing START runs a one-bar click track before capture begins, so your first chord lands on beat one. If the sequencer is already running mid-bar, the count-in waits for the next bar line, keeping the take bar-aligned.

Capture is fairly forgiving, if you play late at the beginning of recording, or don't press end right on the bar, UNA will do its best to clean up. You can always edit the result.

Step-record capture

With **INPUT MODE = STEP REC** you build the chain one chord at a time, independent of playback or the metronome:

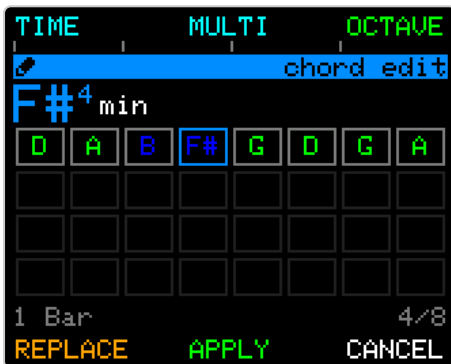
- Press **ARM** to start.
- Play a chord to add a link. Each new link takes the current **TIME** value as its length (1 bar by default).
- Change TIME between chords to vary link lengths - it only affects the *next* link added.
- Play the **same chord twice in a row** to *extend* the previous link by one TIME unit instead of adding a duplicate. (A rolled chord that takes a moment to form is treated as one strike, not two.)
- **UNDO** removes the last link you added.
- **END** commits the chain; **CANCEL** discards it.

Step Record never starts the transport - there's no clock and no metronome running, so you can take as long as you like over each chord.

The chord-name label. While recording, the screen labels the chord you're playing with both its root *and* its quality (e.g. "E min").

Capturing while the music plays. If you capture a new chain without stopping the sequencer, the changeover is clean: the last live chord rides out the current bar, then the new chain takes over on the next bar line - link transitions land on natural bar boundaries, so the melody stays in sync - and playback begins from the chain's **first** link, looping from there.

Editing a Chord Chain



From Chain Mode, press **EDIT** to enter Chord Chain Edit.

Function	What it does
TIME	Change the selected link's duration. Quick press to arm as a latch, then rotate the CONTROL Knob; or hold TIME and rotate the CONTROL Knob for a momentary edit that restores the previous function when you let go.
MULTI	Select a <i>range</i> of links instead of a single one - a "block." Hold MULTI and rotate the CONTROL Knob to extend the block outward from the anchor; or quick press MULTI to latch the multi-select on (then a plain rotate keeps extending). Quick press again to release.
OCTAVE	Shift the selected link's root up or down by whole octaves - the pitch class (C, D, E...) stays the same, only the register changes. Same quick-press-to-latch / hold-and-rotate pattern as TIME.
REPLACE	Swap the chord at the selected link - opens Chain Replace (below). Only the anchor link is replaced, even if a MULTI block is active.
APPLY	Return to Chain Mode. Edits save live as you make them, so this is really "leave with what you've got."
CANCEL	Revert the whole session - every chord swap, every time change, every octave shift, and the chain length - back to how it was when you entered Edit. It's a session-level undo, not a single-edit one.

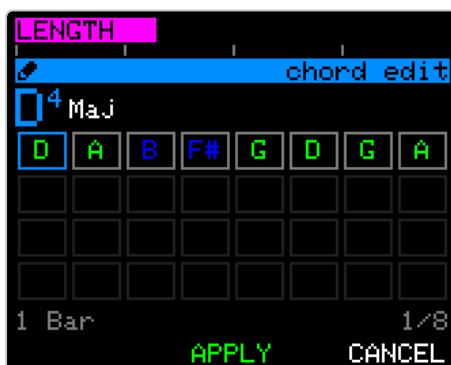
Walking through the chain. With nothing else armed, **rotate the CONTROL Knob** to move the selection from link to link. The card at the top and the footer both update as you go.

Multi-select edits the whole block. Once you've built a block with MULTI, a TIME or OCTAVE change applies to *every link in the block at once* - a fast way to lengthen a whole section, or drop a run of chords an octave together.

Latch vs. hold. TIME, OCTAVE, and MULTI all use the same two-mode pattern. A **clean quick press** latches the function on until you quick press it off again - you can walk away and come back to it. A **hold + rotate** gives you a momentary edit that lasts only as long as your finger's on the button; release, and whichever function was active before comes back. Pick whichever feels right for the edit at hand.

Cancelling out of a function first. If you have TIME or OCTAVE latched and you're done with it but not with the whole session, press **CANCEL** once - it just drops the active function without touching your edits. Press **CANCEL** again (with nothing armed) and *that's* what triggers the full session revert.

Chord Chain Length



To add or remove links from the chain **press and hold the CONTROL Knob and rotate**.

A chord chain can be anywhere from **1 to 32 links**.

While CONTROL is held, the menu row switches into the **LENGTH layout**. Release the CONTROL Knob and the normal layout returns.

Note that, shortening the chain does not lose link information; increasing the chain length uncovers the existing links.

Replacing a chord in a chain



Inside Chain Edit, press **REPLACE** to swap the chord at the current link.

Chain Replace enables listening, so the easiest way to replace a chord is just *play* one: UNA detects the chord under your fingers and offers it as the replacement. If you'd rather pick from suggestions, **SUGGEST** opens the Suggest engine in *substitute* mode - it offers chords that fit the surrounding harmony.

When you've found the new chord, press **BACK** - the chord you're hearing is the one that's kept, and it's written to the chain as you leave. There's no separate APPLY step.

That means Replace has no "discard" button. Instead it gives you an undo pair on a single button:

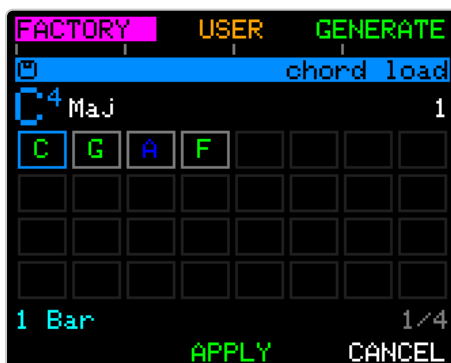
- **RESET** restores the link to the chord it held when you arrived.
- Press it again - it now reads **REVERT** - to bring your replacement back.

So you can flip between the original and your new chord as many times as you like, before applying.

Deleting a link

The Chain Replace screen also has a **DELETE** action (shown in red). Press it to remove the selected link from the chain: the links after it shift forward and the selection moves to the previous link (it stays put if you delete the first link). If the chain has only one link, DELETE doesn't empty the chain - it resets that link to the default chord (C Major) instead.

Saving and loading chains





Pressing **SAVE**, from Chain Mode, allows you to store the current chain to the USER library.

- Rotate the CONTROL Knob to pick a slot.
- Press SAVE to commit, or CANCEL to back out.

Pressing **LOAD**, from Chain Mode, browses the library.

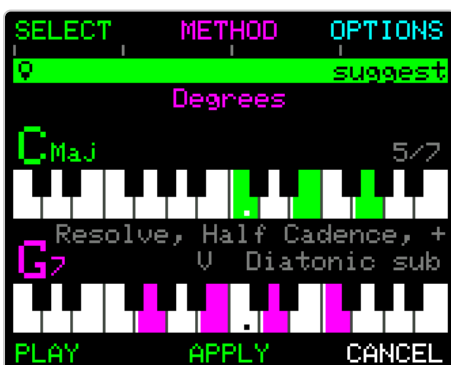
- Rotate to preview slots, press to load.

The loaded chain becomes active immediately and starts driving the music.

Don't forget that, in Chord mode, you can enable or disable the chain by **quick pressing the CONTROL knob**.

Chord Suggest

If your looking for chord ideas to help build a progression, or alternative chords to vary your exist progression, UNA's chord suggestion engine can assist.





From Chord mode, press **SUGGEST** and UNA offers chord ideas that fit the current harmonic context.

Suggest comes in two flavours depending on how you reached it:

- **From Chord Mode directly:** "what should come next?" UNA looks at the chain you've built and proposes chords that lead well from where you are.
- **From Chain Replace:** "what could substitute here?" UNA looks at what surrounds this link and proposes chords that fit between them.

In the Suggest screen:

Function	What it does
SELECT	Open Chord Select if you'd rather build the chord by hand. (See below)
METHOD	Toggle between SMART (engine-driven suggestions) and DEGREES (diatonic chords I–vii° of the key).
OPTIONS	Open the Suggest Options page - set Key (Auto or pinned C–B), Mode (Auto, Major, Minor...), and Method.
PLAY	Audition the highlighted suggestion.
APPLY	Commit the highlighted suggestion.
BACK / CANCEL	Return without committing.

Rotate the CONTROL Knob to browse the suggestions.

The first eight PARAMETER Knobs are also wired as shortcuts: i.e. pressing Knob 4 jumps directly to suggestion 4.

- The **DEGREES** method offers exactly the seven diatonic chords of the current key/mode (I, ii, iii, IV, V, vi, vii°).

- **SMART** uses UNA's engine to widen the field - borrowed chords, secondary dominants, common substitutions.

If the suggestions feel too "vanilla," switch to SMART; if they feel too unpredictable, switch to DEGREES.

Suggested chords will preview in real-time. Pressing **APPLY** commits the chosen chord and returns you to the previous mode.

Chord Select - Building a chord from scratch

If you'd rather build a chord by hand, the **Chord Select** picker lets you do just that. You can find it via the **Suggest Mode** (see above).

NOTE	TYPE	POS
select		
G#	m9	2nd
A	m add9	Root
A#	m9b5	1st
B	m9-Maj7	2nd
C	Maj	Root
C#	min	1st
D	7th	2nd
D#	6th	Root
E	sus4	1st
PLAY	APPLY	CANCEL

From **Chord Mode**, press **SUGGEST**, then **SELECT**.

Select Mode presents three scrollable lists:

- **NOTE** sets the root note (C through B).
- **TYPE** sets the chord quality.
- 42 types are available - every common quality from major and minor through 7ths, 9ths, sus, dim, aug, and a long tail of jazz extensions.
- **POSITION** sets the voicing.
- Voicing determines which note of the chord is on top - root position, first inversion, second inversion, etc. *The number of available positions depends on the chord type.*

Press **NOTE**, **TYPE**, or **POS** to select the active list, then rotate the CONTROL Knob to choose.

The current chord will preview live - you'll hear what you are choosing.

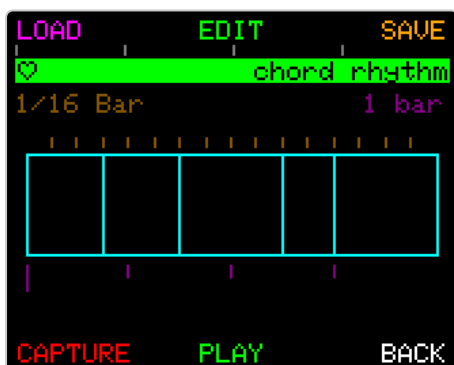
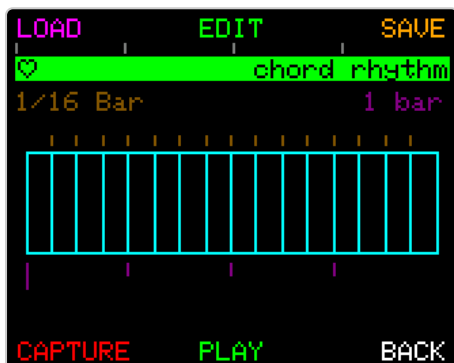
The PARAMETER Knobs are a shortcut for NOTE. Knobs 1–8 map to the white keys C, D, E, F, G, A, B, C respectively. Hold CONTROL and press a knob to select a sharp note.

Once you have what you want, **APPLY** commits the chord and returns to the previous mode; **CANCEL** discards.

Chord Rhythm - how the chord track plays in time

Press **RHYTHM** from Chord Mode to enter Chord Rhythm mode.

Where the chord chain decides *which* chord is played; the **Chord Rhythm** decides *when and how* chord notes are triggered as the chord track plays.



2 Examples. a rhythm can be anything from a punchy 16th-note groove to an Afro-Cuban syncopation - completely different feels for the same chord.

The rhythm is displayed as a block pattern (blue) and each block represents a trigger point in the rhythm loop.

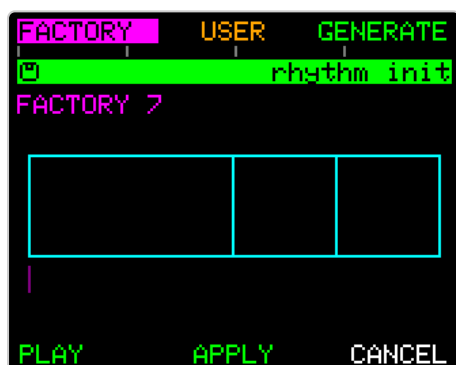
During playback the current rhythm step is highlighted to show where you are in the loop.

Below are the Bar and quarter note markers (purple). Above, the current quantize grid (orange).

RHYTHM is disabled when the chord track is in DRONE mode (see below).

Function	What it does
LOAD	Load a starting rhythm pattern.
EDIT	Step-level edit of the current rhythm.
SAVE	Save the current rhythm to the library.
CAPTURE	Tap a rhythm in from MIDI input.
PLAY / STOP	Transport.
BACK	Return to Chord Mode.

Loading a rhythm



Press **LOAD** in Rhythm Mode to browse starting rhythms. Three sources sit on the top row:

- **FACTORY** - UNA's built-in library of rhythm patterns.
- **USER** - one of your own saved rhythms.
- **GENERATE** - a random rhythm; rotate the CONTROL Knob to roll a new one.

Rotate the CONTROL Knob to browse within the current source; each pick previews live so you can hear it before you commit. Press **APPLY** to keep the previewed rhythm, or **CANCEL** to restore the one you had.

Capturing a rhythm



Press **CAPTURE** in Rhythm Mode. The flow is similar to Chain Record but with one nice twist: UNA stores the inter-tap intervals in milliseconds while you play, and *auto-detects* a sensible quantize grid when you press STOP. You don't have to know in advance what subdivision your taps land on.

- **QUANTIZE.** Locked during capture; on STOP, it shows the auto-detected grid.
- After STOP you can rotate the CONTROL Knob to override the grid, and snap the step position to the new grid.
- **METRO.** Pre-record click toggle.
- **LENGTH.** Post-STOP, sets the loop length. Default is AUTO (the natural duration of what you played, rounded to the nearest quantize division). Override manually if you need to adjust.
- **ARM** → **START** → **STOP** → **PLAY** (state-machine).
- **APPLY.** Commit the rhythm. **CANCEL.**

While recording, a **live bar counter** appears on the screen so you can watch how many bars your rhythm has grown to as you tap.

Editing a rhythm step by step

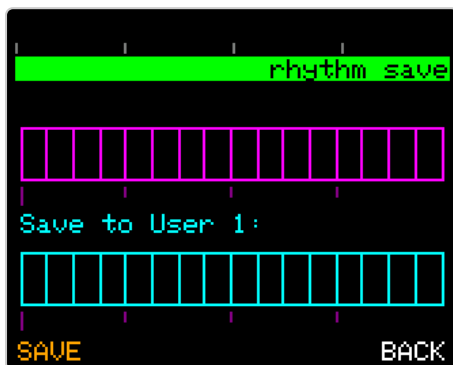


From Rhythm Mode, press **EDIT** for step-level adjustment on the active rhythm.

- Rotate the CONTROL Knob to select a step (the first step is the downbeat and can't be moved).
- Hold the CONTROL Knob and rotate to move the selected step to a different grid position.

- Use QUANTIZE to change the snap grid you're moving on.
- Use LENGTH to change the loop length.
- Press APPLY to commit, CANCEL to discard.

Saving a rhythm



Press **SAVE** in Rhythm Mode to store the current rhythm to one of **16 user slots**.

- Rotate the CONTROL Knob to pick a slot
- Press **SAVE** - UNA asks **YES** to confirm the overwrite or **CANCEL** to back out.
- Press **BACK** to leave without saving.

Chord Track Parameters

Press **PARAMS** from Chord Mode to open the Chord Track parameters menu. This is where the Chord Track's full parameter list lives; including those not accessible via the PARAMETER knobs.



Drone Mode (CHORD vs. DRONE)

Inside PARAMS, the first item under the PRIMARY group is **MODE**. It has two values:

- **CHORD** (default): the chord track plays a rhythmic pattern - the rhythm you set in Chord Rhythm.
- **DRONE**: the chord track holds the chord as a sustained pad, ignoring the rhythm.

The drone only changes when the chord changes, the sequencer stops, you release all live-play keys, you change Octave/Channel/Layers/Pitch on the chord track, or you **mute the Chord Track from the Mixer**.

You can use the Mixer as a drone on/off, the chord snaps back cleanly when you bring it in.

DRONE is useful for ambient pad textures and for letting another instrument carry the rhythm while UNA supplies sustained harmony underneath.

While in DRONE, RHYTHM in Chord Mode is disabled - there's nothing rhythmic to edit.

Lock Octave, Lock Note, Lock Chord

Further down the parameter list, under the **LOCKS** group, you'll find three "override" parameters that pin the chord track's voicing; disengaging certain aspects from the current chord.

- **LOCK > OCTAVE.** Pins the track's octave to a fixed value (instead of inheriting from the chord chain). Use the ParamOctave knob as normal to set the octave position.
- **LOCK > NOTE.** Overrides the root pitch class. The chord shape stays the same; but the track's root note is forced to whichever note you've locked.
- **LOCK > CHORD.** Overrides the chord intervals - picks one of 42 chord types and forces *that* quality regardless of what the chord chain is playing, or your keyboard input.

The locks are powerful for compositional tricks like "every chord becomes a pedal-point on D" or "every chord plays as a major 7th regardless of what the chain says."

They also apply to the Melody and Bass tracks (you'll find the same LOCKS group in their PARAMS menus), making locks a useful per-track override layer.

A safety detail: all three locks reset to OFF when you capture a fresh chord chain, melody, or bass line, so newly recorded material plays back uncoloured.

For a full reference to every Chord Track parameter - what it controls, its range, and how it differs from Melody/Bass - see **Chapter 7 - Track Parameters**. Chapter 7 also documents the RESET, LOCK, CATEGORY, PLAY/STOP, and BACK button behaviours inside the PARAMS menu.

Worked Recipes - for Chords

The "capture a progression" recipe. Plug a keyboard in. Press CHORD on Performance, then CHAIN, then CAPTURE. Set QUANTIZE to 1 bar (press QUANTIZE, rotate CONTROL Knob). Press ARM. Play four chords, one per bar. Press STOP. Press APPLY - the chain is now active and the Melody/Bass tracks will follow it.

The "substitute one chord" recipe. You've got a four-chord chain but the third chord doesn't sit right. CHAIN → EDIT → walk to chord 3 with CONTROL → REPLACE. Either play the new chord on your keyboard (UNA detects it), or press SUGGEST for ideas. APPLY when satisfied.

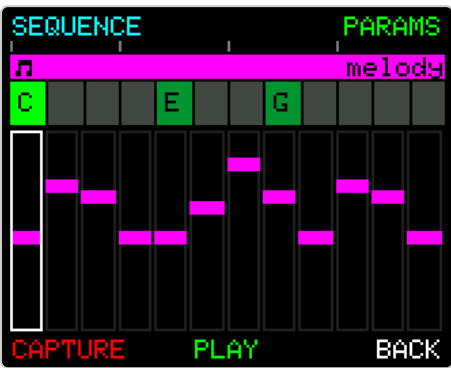
The "drone pad" recipe. You want the chord track to hold a long pad while the melody dances over the top. PARAMS → select MODE → set DRONE. The Chord Track is now a sustained pad. Tip: Set GATE to a high value if you want the pad to slow release when chords change.

The "force every chord to a major 7th" recipe. PARAMS → LOCK CHORD → set to MAJOR 7. Every chord in your chain now plays as a major 7th regardless of chord input. Useful for getting a quick "everything sounds like Steely Dan" effect.

What's next

Chord Mode controls the harmony. Chapter 9 covers Melody Mode - the track that runs over that harmony - and Chapter 10 covers the Stepper, where you can sculpt the melody step by step. Chapter 12 (Modulate) is also worth a visit once you've built a few chains: a slow filter sweep on the chord track, or an evolving rhythm pattern, can take a static progression somewhere unexpected.

Chapter 9 - Melody Mode



Melody Mode is where the Melody Track gets shaped. The Melody track is constructed with parameters, plus the deep editing surface - the **Stepper**. Also, where you capture new melodic phrases from your keyboard.

The Stepper itself is detailed in Chapter 10; this chapter covers how you get into it and what surrounds it.

A reminder from Chapter 5: the Melody Track plays single-note lines that follow the current chord or chord chain. Whatever harmony is underneath, the Melody picks notes that fit. You shape the line; UNA keeps it in key.

Getting in and out

From Performance Mode, press **MELODY**. If Melody isn't already the active track, the first press selects it and a second press opens the mode (Chapter 6).

UNA enters Melody Mode and the following CONTROL buttons are assigned:

SEQUENCE	(unused)	PARAMS
CAPTURE	PLAY / STOP	BACK

As elsewhere, the music keeps playing while you edit.

The five active controls in Melody Mode are entry points to different depths:

- **SEQUENCE** - opens the Stepper, where you sculpt the melody step by step. Chapter 10 is the deep dive.
- **PARAMS** - opens the Track Params menu (track-level configuration, including the Lock controls).
- **CAPTURE** - opens Melody Record, where you play a phrase in.
- **PLAY / STOP** - the transport.

- **BACK** - return to Performance.

The eight PARAMETER Knobs are live in Melody Mode - turn a knob to adjust a melody parameter directly.

As elsewhere, pressing CONTROL takes you to the Control space (the mixer).

The PARAMETER Knobs

The eight PARAMETER Knobs in Melody Mode work the same way as elsewhere on UNA: **rotate** a knob to edit its **primary** parameter live, or **press-and-rotate** to edit its **secondary** parameter. The display shows the parameter name and value as you turn.

Chapter 5 has the full mental model. The parameter mapping can be found in the Track Params, Chapter 7.

Track Parameters

Press **PARAMS** to open the Melody Track parameters menu. Parameters are grouped into categories you can walk through - the CONTROL Knob steps through categories and rows, press-and-rotate changes values. The categories, in order:



- **PRIMARY** - the parameters that affect individual notes and steps. Most of these are the *primary* layer of the PARAMETER Knobs (OCTAVE, CHANNEL, DELAY, LAYERS, GATE, VELOCITY, PITCH, SLICE), plus the *toggle-style* parameters that don't sit on a knob directly: MODE, DELAY TYPE, VOICE MODE, SLICE TYPE.
- **SECONDARY** - the parameters that affect the sequence as a whole. These are the *secondary* layer of the PARAMETER Knobs: STEPS, ROTATE, JUMP, DIRECTION, TIME, MUTES, ACCENTS.
- **LOCKS** - OCTAVE, NOTE, CHORD. The override layer that pins the track's voicing regardless of the chord chain. Chapter 7 covers Locks in full.
- **PITCH STEPPER, GATE STEPPER, VELOCITY STEPPER, SLICE STEPPER, OCTAVE STEPPER, CHANNEL STEPPER, DELAY STEPPER, LAYERS STEPPER** - one Stepper category per primary parameter. Each contains LENGTH, ROTATION, MORPH AMOUNT, MORPH FREQ, SHAPE

RANGE, SHAPE INVERT, FLT EUCLID, FLT DEVIATE, and an ACTIVE toggle. Chapter 10 is the Stepper deep dive.

Quick shortcut: you don't have to scroll to reach a parameter. **Press a PARAMETER Knob (1–8)** to jump the menu highlight straight to that knob's parameter - press once for the primary, or press and hold CONTROL and a PARAMETER Knob for the secondary.

For a full reference to every parameter - what it controls, its range, and its default - see **Chapter 7 - Track Parameters**. Chapter 7 also documents the RESET, LOCK, CATEGORY, PLAY/STOP, and BACK button behaviours inside the PARAMS menu.

Capturing a melody - Melody Record



Press **CAPTURE** from Melody Mode to enter **Melody Record**. This is where you play a phrase on your keyboard and UNA writes it into the Melody Track's sequence.

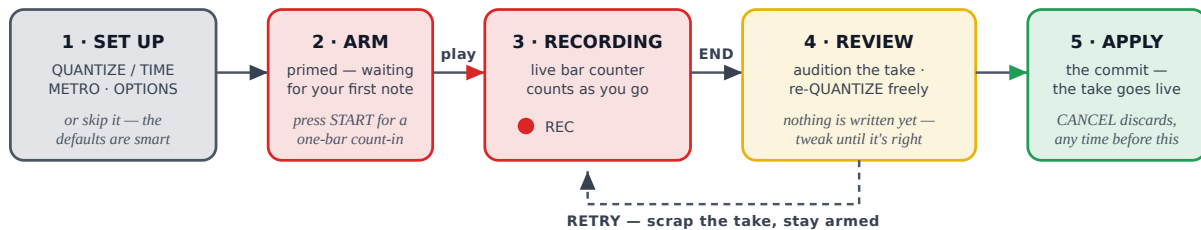
While recording, a few things happen automatically: the Melody Track is muted (so the existing sequence doesn't play over you), the chord chain is paused (so what you play isn't transposed by a shifting chord), and MIDI Thru is enabled (so you hear yourself as you play). When you finish, those reset to whatever they were before.

Just press ARM and play

There's no preparation to do. UNA **auto-quantizes** what you play against its best-guess grid, uses sensible defaults for velocity, gate, and timing capture, and gets out of your way. The fastest path from an idea in your head to a Melody Track sequence is: **ARM, play your phrase, END, APPLY**.

Every capture is the same five steps

Chords, rhythms, melodies, bass lines, patch chains — learn this flow once and every record screen on UNA is familiar.



INPUT MODE — SET IN OPTIONS, DECIDES HOW STEP 3 FEELS

REALTIME

Play it as a performance. UNA records against the clock and snaps to the quantize grid; velocity, gate and micro-timing can be captured too.

For when the phrase is in your hands.

STEP RECORD

One entry per key press — no clock, no metronome, no hurry. The rhythm comes from the grid.

REST = silent step · **TIE** = extend · **UNDO** = step back

For when the phrase is in your head.

ONE FLOW, FIVE HOMES

Chord Chain · Ch 8

Chord Rhythm · Ch 8

Melody · Ch 9

Bass · Ch 11

Patch Chain · Ch 14

details differ; the walk doesn't.

When you press ARM, UNA waits for the first note. As soon as you play, the capture begins. Recording continues until you press END.

Alternatively, Press Start to hear a count in before recording starts. Useful for keeping in time during playback, or leaving a gap at the beginning of a capture.

The capture loop ends on your last note-off, not on END. UNA times the loop from your first note to your last note-off, then quantizes the end of the recording. So you don't need to be super accurate when pressing END.

While recording, a **live bar counter** appears on the screen so you can see how many bars you've captured at a glance - useful for pacing longer phrases without losing count.

Tuning the capture (optional)

If the defaults don't suit - you want a specific snapping grid, a count-in click, or a change to how UNA captures velocity or gate - the pre-record screen exposes the most-used controls directly, and OPTIONS opens the full settings list.

Function	What it does
QUANTIZE / TIME	Override the auto-quantize with a specific snapping grid (QUANTIZE), or set the note length in Step Input mode (TIME). Press to select, then rotate the CONTROL Knob. Leave alone and UNA picks the grid for you.
METRO	Toggle a count-in metronome click during capture. Useful when you're recording without an existing groove to lean on.
OPTIONS	Open Melody Record Options - the full configuration list (see below).
ARM	Prime capture.
BACK	Return to Melody Mode without recording.

Realtime vs. Step Input

Two ways to capture, set in Options:

- **Realtime Input.** You play the phrase as you'd play any instrument - UNA captures the timing of your performance. Velocity is captured (optional). Gate length per note is captured (optional). Subtle timing offsets (swing, lay-back) are preserved in per-step delays (optional).
- **Step Record Input.** UNA advances one step per note you play. You don't have to play in time - the rhythm comes from the grid, not from your performance. In Step Record mode three controls take on entry-aid roles: **REST** (insert a silent step), **TIE** (extend the previous note across this step), **UNDO** (delete the last step).

After you stop



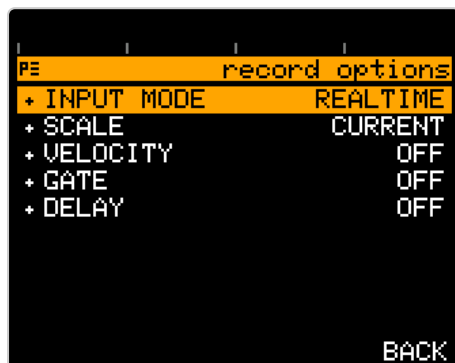
When you press **STOP**, the captured phrase is in a buffer but not yet committed. UNA shows the raw notes you played above, and the auto-quantized version below (here snapped to a $\frac{1}{8}$ Bar grid, and current chord pitches); plus the note/step counts along the bottom. You can:

- **QUANTIZE** - re-quantize the buffer with a different grid setting.
- **OPTIONS** - adjust capture options (e.g. swap to a different scale derivation, then re-apply).
- **RETRY** - start over.

- **APPLY** - write the phrase into the Melody Track sequence. This is the commit.
- **CANCEL / BACK** - discard.

You can audition, tweak, audition again, and only commit when it sounds right.

Melody Record Options



Press **OPTIONS** from the Melody Record screen for the full configuration list. Rotate the CONTROL Knob to navigate; hold and rotate to change the selected value.

Option	Choices	What it does
INPUT MODE	Realtime / Step Record	The capture style described above.
SCALE	Current / Derive	"Current" forces the phrase into the active scale; "Derive" infers a scale from the notes you played.
QUANTIZE	Off / 1/32 → 1 bar	The snapping grid for your performance.
RESPONSE	50–500ms	Settle window - how long UNA waits for "clean" note-on timing before locking the pitch. Useful for controllers with slow keybed velocity sensing.
VELOCITY	ON/OFF	Whether per-note input velocity is captured.
GATE	ON/OFF	Whether per-note input gate length is captured.
DELAY	ON/OFF	Whether per-step input micro timing is captured.

Setting VELOCITY, GATE, and DELAY to ON will give you a phrase that sounds the way you played it. Set each to OFF and you'll get a phrase with uniform dynamics and timing; sounding more mechanical, and perhaps, easier to layer Modulation on top later.

What happens to existing settings on capture

A safety detail worth knowing: when you commit a fresh capture, **the three Lock parameters (LockOctave, LockNote, LockChord) reset to OFF**, and **the Stepper morph parameters reset to defaults**. This is intentional - a fresh capture plays back uncoloured by old overrides, so you hear what you played, not what the previous Lock settings would have done to it. If you want to re-apply Locks after the capture, re-set them in PARAMS.

The Lock controls

The Melody Track exposes the same Lock Octave / Lock Note / Lock Chord controls as the Chord and Bass tracks. They're documented in detail in Chapter 7.

Use the Locks for the same compositional tricks: pin the octave to a fixed range, force the root, or constrain the melody to a specific chord-type's intervals regardless of what the chord chain says.

Worked Recipes - for Melody

The "play it once, keep it" recipe. From Performance, MELODY → CAPTURE. Make sure INPUT MODE is Realtime (in OPTIONS). Press ARM. Play your phrase. STOP. PLAY to audition. If it's right, APPLY. If it's not, RETRY.

The "build a melody one step at a time" recipe. MELODY → CAPTURE → OPTIONS → set INPUT MODE to Step Record. Press ARM. Play a note (step 1), play another (step 2)... use REST to skip a step and TIE to extend the previous note. Hit END when you've laid down enough. APPLY.

The "deep edit" recipe. Once you've captured (or just rotated parameters to get something interesting going), press SEQUENCE. You're in the Stepper, where every step is independently editable. Chapter 10 takes it from here.

What's next

Chapter 10 picks up where this chapter leaves off - the Stepper, your deepest editing surface for the Melody Track. Chapter 12 (Modulate) is also a useful companion: a Modulate slot pointed at a Melody parameter (Pitch, Gate, Velocity...) will evolve that parameter automatically over time, turning a captured phrase into one that evolves.

Chapter 10 - The Stepper (Melody only)

The Stepper is the Melody Track's deepest editing surface - a per-step grid where you can sculpt every note of a sequence one step at a time. Chapters 9, 10 and 12 cover how to *make* a chord chain, a melody, and a bass line; this chapter is where you move from "playing UNA" to "composing on it."

What you can sculpt - the 8 lanes

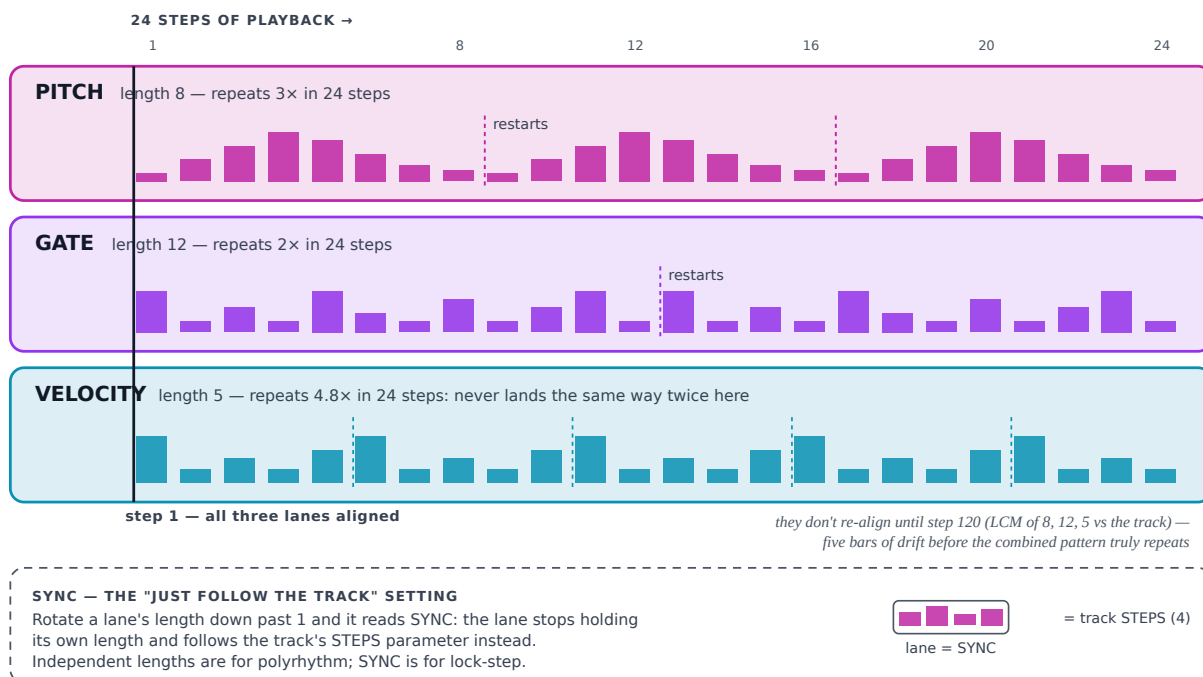
The Stepper has **8 lanes**, one for each of the Melody Track's primary parameters. Each lane holds up to 32 steps of independent values.

Lane	What it controls
PITCH	The pitch offset for each step, in scale degrees. This is your tune.
GATE	Note length. Supports Tie (extends the previous note across this step) and Slide (legato overlap into the next step) as special values.
VELOCITY	How loud each step plays. Supports Accent (full velocity) and Mute (silent step) as special values.
SLICE	Per-step subdivisions of your notes; chops, ratchets, trills and strums.
OCTAVE	12 semitone pitch-shift per step.
CHANNEL	Per-step MIDI channel shift; play individual notes of the melody on different sounds/synths.
DELAY	Timing offset per step. Where micro-groove lives.
LAYERS	Number of layered notes per step.

Each lane is independent - you might set PITCH to a length of 8, VELOCITY to 16, and GATE to 32. The tracks all cycle at their own lengths, coming back into phase every so often. This is one of the ways an UNA sequence starts to feel alive rather than static.

Every lane has its own length

Pitch at 8, Gate at 12, Velocity at 5 — each cycles at its own rate, and the melody keeps reshaping as they drift.

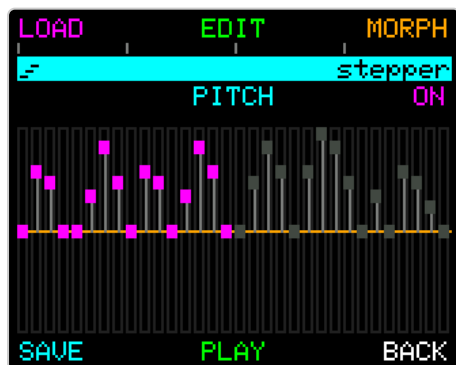


Getting in and out

From Melody Mode, press **SEQUENCE** to enter the Stepper. UNA opens on whichever lane was last active.

Once inside, pressing **BACK** at any level returns you toward Melody Mode. The music continues throughout, you can dive into the Stepper mid-performance and sculpt without stopping.

The Sequence mode



The main Stepper mode shows the 32-step grid of the current lane at a glance, with a header telling you which lane you're on and whether that lane is currently **ON** or **OFF**. Enabled steps are bright; disabled ones are greyed out.

LOAD	EDIT	MORPH
SAVE	PLAY / STOP	BACK

The four active workspaces are LOAD, EDIT, MORPH, and SAVE - four different things you can do with the current lane.

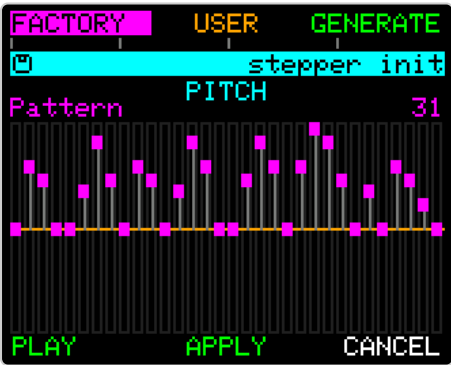
Switching lanes. Rotate the CONTROL Knob (without pressing) to cycle through the 8 lanes.

Toggling the lane on and off. Press-and-release the CONTROL Knob to toggle the currently displayed lane between ON and OFF. A disabled lane keeps its step values but stops contributing to the output.

Jump to any lane instantly. Pressing a PARAMETER Knob takes you to that knob's lane in the Stepper - a quick way to switch between what you're editing.

LOAD - factory patterns, user patterns, and random

Press **LOAD** from Sequence to browse patterns you can drop into the current lane.



FACTORY	USER	GENERATE
PLAY / STOP	APPLY	CANCEL

Three sources:

- **FACTORY.** UNA's built-in library of stepper patterns for the current lane. Each lane has its own factory set - patterns that make musical sense for that parameter (a pattern for Pitch, for instance, isn't the same as one for Delay).
- **USER.** Your own saved patterns. 16 slots per lane.

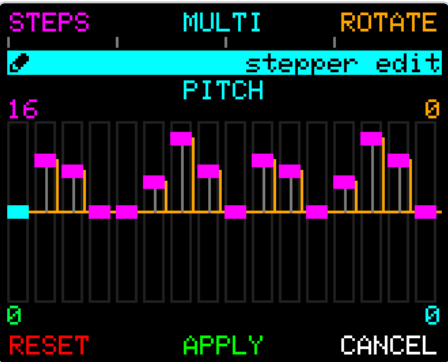
- **GENERATE.** Procedural generation. Rotate CONTROL to change the random seed; press-and-rotate to change the "strength" (how far the generated values deviate from the lane's default).

Rotate the CONTROL Knob to browse within the selected source. Each pattern previews live - you *hear* it playing on the lane as you scroll.

- **APPLY** commits the previewed pattern
- **CANCEL** restores the original pattern.

The live preview is powerful for finding a starting point: scroll through 20 factory patterns, listen to each for a bar or two, choose on the one that you like.

EDIT the stepper sequence



Press **EDIT** to sculpt the current lane step by step, giving you fine grain control over each step.

STEPS	MULTI	ROTATE
RESET/REVERT	APPLY	CANCEL

The core gestures for editing a step are on the CONTROL Knob:

- **Rotate the CONTROL Knob** to select a step. The selected step is highlighted on screen.
- **Press-and-rotate the CONTROL Knob** to change the value of the selected step.

STEPS, and SYNC mode

Hold **STEPS** and rotate the CONTROL Knob to change the lane's step length (from 1 to 32).

Each lane's length is independent. Pitch might run at 8, Gate at 12, Velocity at 5, and each cycles at its own rate, separate to the track's Steps parameter.

A useful mode: if you rotate Length down past 1 to 0, the lane enters **SYNC**; in this mode the lane stops holding its own length and starts following the track's main Steps parameter instead. Rotate Length back up from SYNC (any increase) and the lane takes independent length again, starting at 1.

SYNC is the "just follow the track" setting; independent lengths are for polyrhythms and cross-cycling patterns.

Rotation

ROTATE works the same way as STEPS but rotates the pattern instead of resizing it. Hold ROTATE and rotate the CONTROL Knob to shift the whole lane's step values left or right within the 32-step grid.

Useful when you've built a pattern that starts on the wrong beat, or you want to loop over different patterns during a performance. Again, this is independent from the Track's own Rotate parameter.

Multi-step selection

Sometimes you want to edit a run of steps together. **MULTI** turns on block selection. It lights cyan when active.

Hold MULTI and rotate the CONTROL Knob to extend a block outward from the current step - or simply **quick press MULTI to latch it** (if you'd rather not keep a finger on the button).

- **Press-and-rotate the CONTROL Knob** while the block is active - every step in the block updates together. Move all four steps up an octave in one gesture.
- **Rotate without pressing** clears the block and returns to single-step selection.

Multi-select is one of the fastest ways to shape a pattern quickly - set a run of eight steps to the same value, then walk through and tweak the ones that need attention.

RESET and REVERT - the safety net

RESET / REVERT is a toggle that lets you experiment without fear of losing your work.

- Press **RESET (red label)** and the whole lane snaps back to how it was when you entered EDIT - undoes all your session edits (step values, Length, Rotation).
- After RESET, the label reads **REVERT (green)**. Press it to bring your edited version back. Flip between the two as often as you like.
- Making any new edit re-arms RESET - the label becomes RESET again, and pressing it will restore the newly-updated "entry" snapshot.

This gives you a fast A/B: try a wild variation, hit RESET to hear the original, hit REVERT to hear your variation, decide which one you like.

CONTROL + RESET works on a smaller scale. In EDIT mode, hold CONTROL and press RESET to reset just the **selected step** (or the current MULTI block) to the lane's baseline default value. Press again with CONTROL still held to revert those steps to their previous value. This is per-step surgery, independent of the whole-lane RESET/REVERT.

Special values on Gate and Velocity

Two lanes have special values beyond their normal ranges:

On the Gate lane:

- **Tie** - extends the previous step's note across this step (holds the note over).
- **Slide** - legato overlap into the next step (no gap between notes).

On the Velocity lane:

- **Accent** - plays this step at full velocity, regardless of the lane's other values.
- **Mute** - silences the step entirely.

To enter a special value, press and hold **CONTROL** and you'll see the button relabel itself to tell you what it will do:

- **TIE/SLD** on the Gate lane
- **ACC/MUTE** on the Velocity lane.

Each press cycles through that lane's special values and back to the normal range.

Applying or cancelling

- **APPLY** commits your edits and returns to Sequence.
- **CANCEL** discards everything you did in this EDIT session.

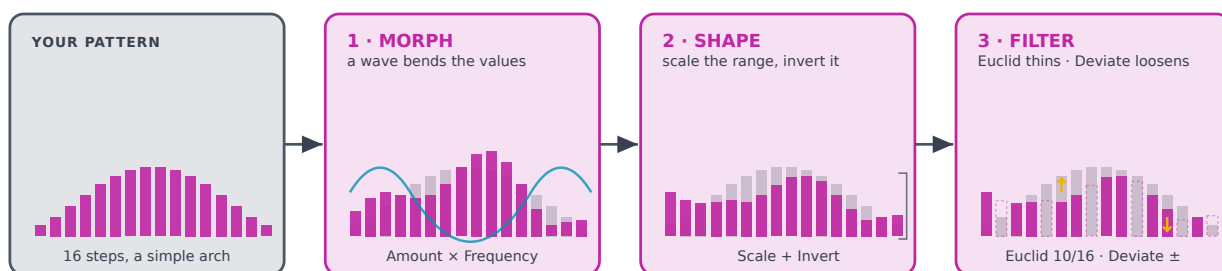
MORPH - transforming the lane

Press **MORPH** from Sequence to open the Morphing tools.

Morph is a three-stage transformation pipeline that reshapes the lane's values without editing individual steps. It's how you take a straight pattern and give it variance, in a non-destructive way. You can also scale and filter the sequence in ways that maintain its original pattern structure, but generates alternative variations on the same theme.

Morph: one pattern, three stages, still yours

A whole-lane transformation — no step-by-step editing, and the original pattern is kept underneath (RESET brings it back, any time).



Same underlying shape — recognisably yours — but sparser, bent, and alive.

NON-DESTRUCTIVE — THE GHOST IS THE POINT

The grey ghost in every panel is your original pattern. Morph never overwrites it: the three stages are a lens the lane is viewed through. Open Morph and press RESET — even days later — and the lane snaps back to the ghost.

the original, safe

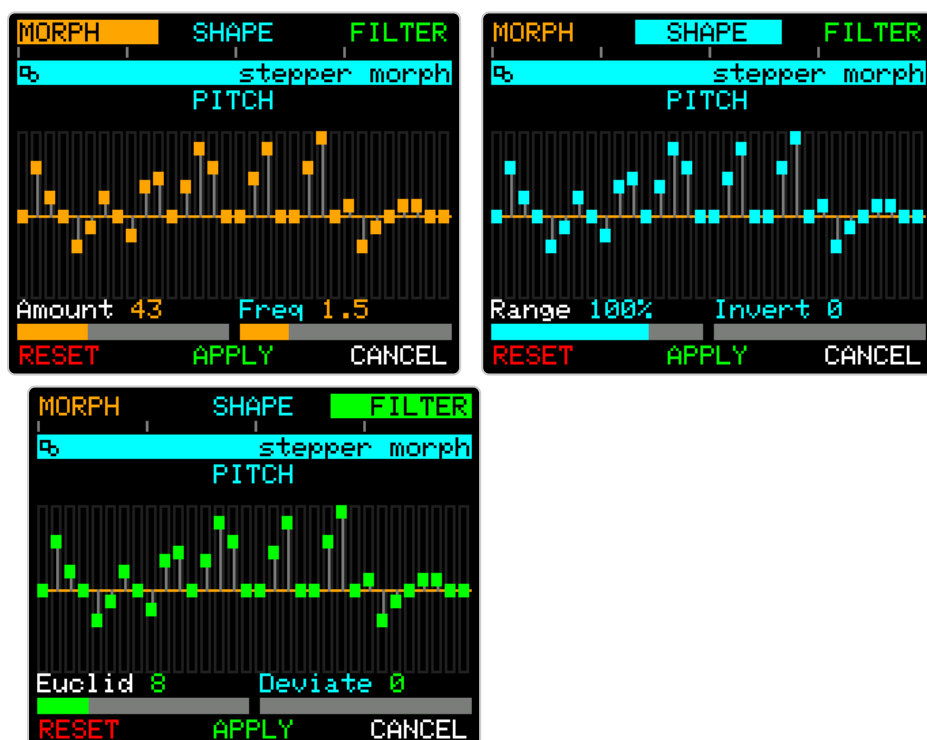
THE SIX CONTROLS

MORPH: Amount (rotate) · Frequency (press-rotate)

SHAPE: Scale (rotate) · Invert (press-rotate)

FILTER: Euclid (rotate) · Deviate (press-rotate)

Turn one knob and listen — land somewhere interesting, then APPLY.



The three stages:

MORPH	SHAPE	FILTER
RESET	APPLY	CANCEL

Stage 1 - MORPH. A wave modulation applied to the base values. Two controls:

- **Amount** (CONTROL rotate) - how strongly the wave affects the values. 0 has no impact. Higher or lower amplifies the effect.
- **Frequency** (CONTROL press and rotate) - how many wave cycles fit into the pattern. Set to 1 for a slow rise-and-fall across the whole loop; set higher for a faster oscillation.

Stage 2 - SHAPE. Applies scaling and inversion to the morphed values:

- **Scale** (CONTROL rotate) - compresses or expands the range of values.
- **Invert** (CONTROL press and rotate) - mirrors the pattern around its centre. Centre value is no inversion; extremes flip the pattern top-to-bottom.

Stage 3 - FILTER. Two very different filter tricks:

- **Euclid** (CONTROL rotate) - an Euclidean rhythm filter. Sets how many steps in the 32-step pattern remain active; the rest are filtered out. Turn from 32 down toward 1 to sparsen a busy pattern.
- **Deviate** (CONTROL press and rotate) - adds controlled randomness to the values that were cut by the filter. Centre value is no randomness; extremes turn the pattern into something more free.

Each of the three stages has its own selector - MORPH, SHAPE, FILTER. Press one to switch to that stage's controls.

- **RESET** clears the current stage back to defaults;
- **CONTROL + RESET** resets all three stages.
- **APPLY** commits the morphed result to the lane;
- **CANCEL** discards.

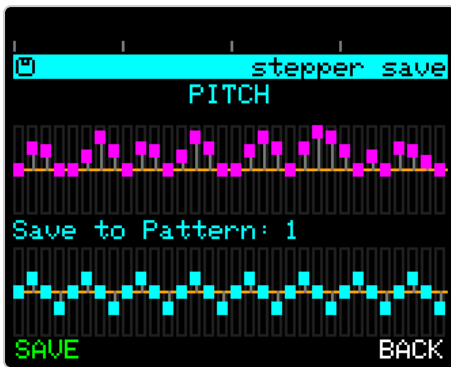
Because Morph works on the lane as a whole, it's a fast way to explore variation without touching individual steps.

Set a pattern you like, then open Morph and turn the Amount knob - you'll hear the same underlying shape start to transform. Land somewhere interesting and APPLY.

NON-DESTRUCTIVE EDITS - Remember: You can remove the morph at any time if you open Morph and press RESET - even after exiting the Morph screen.

SAVE - building your library

Press **SAVE** from Sequence to save the current lane to one of the 16 user slots for that lane.



- Rotate the CONTROL Knob to pick a target slot.
- Press **SAVE** to enter confirmation
- then **SAVE again** to commit - or **CANCEL** to back out.

The two-press confirm prevents you from accidentally overwriting a slot you meant to keep.

While User Saves are global, they are also per-lane (Pitch patterns and Gate patterns are stored separately), leaving plenty of storage for your personal library.

Worked Recipes - for the Stepper

The "build a groove from scratch" recipe. From Performance, MELODY → SEQUENCE. You're on whichever lane was last active - rotate CONTROL to reach VELOCITY. Press EDIT. Rotate to step 1, press-and-rotate to set an accent value. Rotate to step 3, press-and-rotate, and so on. Set steps 1, 5, 9, 13 to accent, everything else to a mid-velocity - you've got a 4-on-the-floor pattern. APPLY. Rotate CONTROL to GATE, EDIT, tie steps 2 and 4 for legato phrasing. APPLY. Rotate to PITCH, EDIT, walk through and set each step's scale degree. APPLY. You've built a three-lane groove.

The "just get me a pattern" recipe. From Sequence, LOAD → GENERATE. Rotate the CONTROL Knob to try different seed numbers - you're auditioning random patterns for the current lane. Land on one that fits. APPLY. Repeat for the other lanes if you want. This is a fast way to seed a patch that you'll then tweak by hand.

The "make it evolve" recipe. With a Pitch pattern already in place, press MORPH. MORPH stage is active. Turn Amount up until you hear the values start to drift; adjust Frequency to about 1 cycle per 32 steps. Now switch to SHAPE; Invert around 30 degrees. Switch to FILTER; pull Euclid down to 24 to open up some space. APPLY. The pattern is recognisably yours but no longer static.

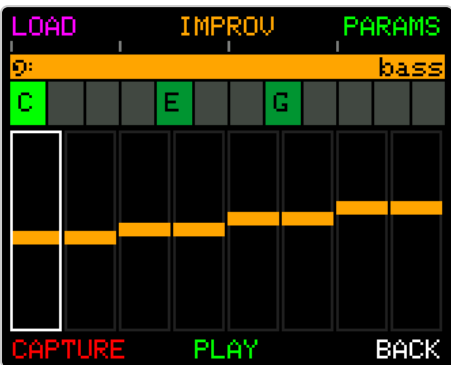
The "polyrhythm" recipe. Enter EDIT on the Pitch lane, hold STEPS, rotate to length 5. APPLY. Enter EDIT on Gate, hold STEPS, rotate to length 7. APPLY. Enter EDIT on Velocity, length 3. APPLY. The three lanes cycle at 5, 7, and 3 steps against the track - patterns won't line up again for many bars, and the melody grows and reshapes as they drift.

What's next

The Stepper is a big feature and this chapter is a lot. If it feels overwhelming, focus first on EDIT - that's the workshop where 80% of your time will be spent. LOAD is your library. MORPH is where you go when a pattern feels tired. Everything else is refinement.

Chapter 12 (Modulate) pairs beautifully with the Stepper: a Modulate slot pointed at a Stepper lane's Amount or Rotation will evolve that lane over time, turning a fixed pattern into a moving one without your ever having to touch it again.

Chapter 11 - Bass Mode



The Bass Track is UNA's third independent voice - a bassline that follows the same chord chain as the Melody Track but with its own parameters, its own captures, and its own way of generating variation.

The editing surface reflects what bass parts actually do in music. Where Melody gives you per-step precision via the Stepper, Bass gives you **Improv** - a probability-driven system that lets a captured bass line vary without ever drifting out of key.

Getting in and out

From Performance Mode, press **BASS**. If Bass isn't already the active track, the first press selects it and a second press opens the mode (Chapter 6).

UNA enters Bass Mode and the CONTROL buttons are assign as:

LOAD	IMPROV	PARAMS
CAPTURE	PLAY / STOP	BACK

- **LOAD** - seed a bass pattern from one of 50 presets, browse by category, or have UNA generate one for you.
- **IMPROV** - open the Improv page where the 9 Improv parameters live.
- **PARAMS** - track parameters menu, including the Lock controls.
- **CAPTURE** - record a bass line from MIDI input.

Press **BACK** at any time to return to Performance.

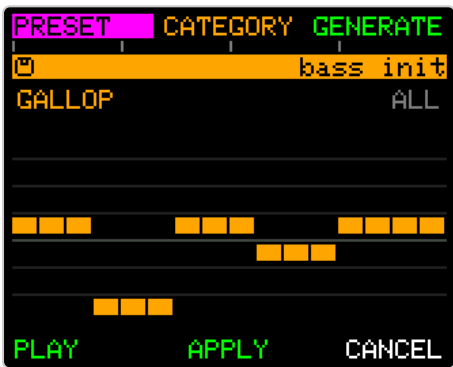
The eight PARAMETER Knobs are live, same as Melody Mode - adjust track parameters directly without entering a sub-mode.

Why there's no Stepper here

The Melody Track has a Stepper. The Bass Track does not - and this is a design choice, not a feature gap. Melody is where you want per-step precision. Bass is where you want a strong line that can vary a little each pass - locked enough to be a groove, varied enough not to feel mechanical.

The Improv system gives you that variation by playing odds: chance of a pitch shift, chance of an octave jump, chance of a layered note, all gated by a master probability. You set the rules; UNA improvises within them.

LOAD - Seeding a bassline



Press **LOAD** from Bass Mode and you arrive at Bass Presets, where you can choose a starting bassline.

Function	What it does
PRESET	Browse a curated library of 50 named patterns. CONTROL Knob scrolls.
CATEGORY	Filter the library by genre (ALL / ROCK / POP / FUNK / LATIN / JAZZ). CONTROL Knob picks the category.
GENERATE	Procedurally generate a pattern. CONTROL Knob picks a seed number (0–999); the current category biases the generation toward that style.
APPLY	Commit the previewed pattern to the Bass Track.
CANCEL	Discard and return to Bass Mode.

The three modes share a single preview - whatever you've got selected is auditioning live, so you can hear it before you commit. The PARAMETER Knobs are still active for live track, the preset only sets the *pitch and octave* content, leaving the playback shape under your control.

A note on what a preset is. Bass presets are pitch sequences - root walks, pedal points, climbs, syncopations. They don't carry gate or velocity values, so each preset will play in whatever rhythmic feel you've set on the Bass Track's own parameters. That means a "Walking Jazz" preset and a "Rock Driver" preset can be loaded into the same gate/velocity setup and you'll just hear them as two different walking lines, not as two different productions.

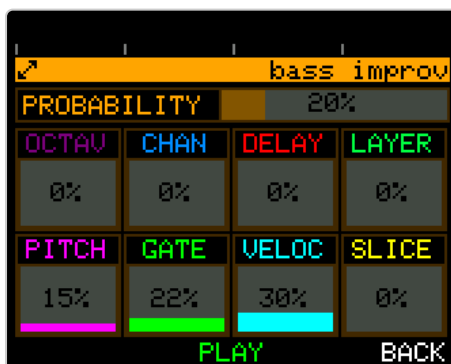
The 50 presets are organised across five genre categories:

- **ROCK** - ROOTS, POWER, DRIVE, STOMP, CHUG, RIFF, ANTHEM, GALLOP, DROP, CRUNCH
- **POP** - SIMPLE, GROOVE, SWING, UPBEAT, BOUNCE, STEADY, POCKET, SMOOTH, CLEAN, BRIGHT
- **FUNK** - FUNKY, TIGHT, SYNCOPATED, PERCUSSIVE, GROOVING, PUSHING, SHUFFLED, SLAP, POPS, SNAPPY
- **LATIN** - CLAVE, BOSSA, SAMBA, MERENGUE, MAMBO, TANGO, RUMBA, CUMBIA, GUAGUANCO, MONTUNO
- **JAZZ** - WALKING, PEDAL, COMPING, WALKING2, SPARSE, FLOATING, CHROMATIC, OPENSTRING, BOHEMIA, BLUES

CATEGORY mode lets you stay within a feel; **ALL** disables the filter and lets you browse the whole library.

Generate is the random option. UNA's pattern generator uses a category-biased random algorithm - pick LATIN and turn the CONTROL knob, you'll get LATIN-flavoured patterns (more syncopation, more chromatic notes); pick ROCK and you'll get root-heavy steady lines. The seed number is just a label for the random state, so writing it down means you can come back to the same generated pattern later.

IMPROV - variation by probability



Press **IMPROV** from Bass Mode for the dedicated Improv configuration page. This is where the nine Improv parameters live, with the most important one - PROBABILITY itself - on the CONTROL Knob.

The screen layout reflects how Improv is wired:

- **CONTROL Knob** → **PROBABILITY** (0–100).
- This sets *how often* a deviation happens. At 0, nothing varies - the bassline plays exactly as captured. As you raise it, more steps are deviated. PROBABILITY is rolled independently for each parameter, so the eight parameters don't all land on the same steps. Turn this knob first; everything else is secondary.
- **PARAMETER Knobs 1–8** → **the eight Improv parameters**.
- Each knob sets *how much* its parameter deviates - the size of the move, not how often it happens.

The nine parameters:

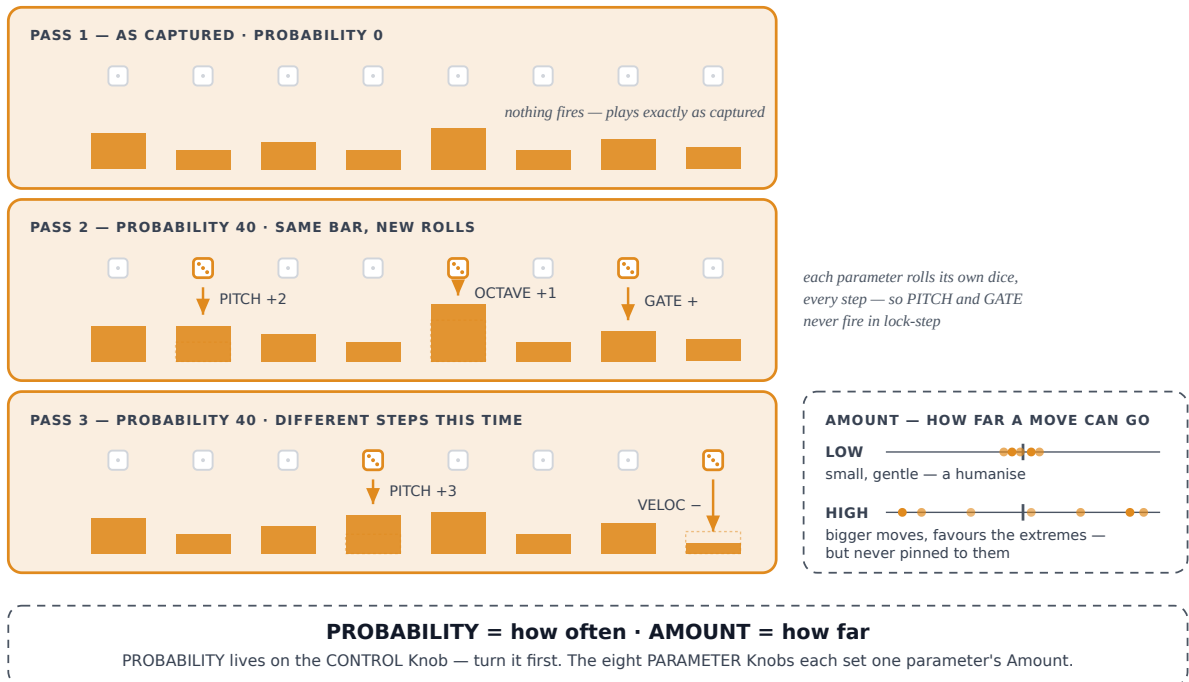
Parameter	What its Amount controls
PROBABILITY	The master gate - <i>how often</i> any deviation fires (lives on the CONTROL Knob)
PITCH	How far the note can drift to nearby scale degrees
GATE	How much the gate (note length) varies
VELOC	How much the velocity varies
SLICE	How much extra subdivision (ratchet) is added
OCTAV	How far the step can jump in octaves
CHAN	How far the MIDI channel shifts (for split-synth setups)
DELAY	How much swing / timing offset is added
LAYER	How many extra notes are stacked above the played note

How a deviation is applied. Each step, every parameter independently rolls against PROBABILITY to decide *whether* it deviates. When it does, that parameter's own knob - its **Amount** - decides *how far*.

Amount doesn't scale the move evenly; it shapes it. At low settings the moves are small and gentle, a subtle humanise that can't make a big jump. As you raise Amount they grow and increasingly favour the parameter's extremes, so high settings reach the full range often - but never *every* time, keeping the result musical rather than pinned to the maximum.

Improv plays the odds

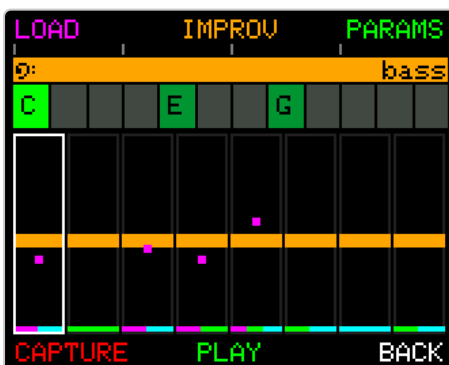
PROBABILITY sets how often a step deviates. Each parameter's Amount sets how far. You set the rules; UNA improvises inside them.



Creating swing. DELAY adds a random timing offset to the steps it fires on, and, like every other parameter, it's gated by PROBABILITY.

- Set the **Delay Type** parameter to **SWING** and DELAY only offsets every other step, giving a random, swing variation.
- In the default **ALL** mode it can nudge any step.

Press **BACK** to leave the Improv page.



The Bass mode display shows the per-step variations being applied (during playback), with colour coded markers on each affected step, so you can see the improv working in real-time.

Capturing a bass line



Press **CAPTURE** from Bass Mode for **Bass Record** - the same capture model as the Melody Track, applied to the Bass Track.

The mechanics are identical to Melody Record (see Chapter 9), so we won't repeat them here.

The pre-record control layout:

Function	What it does
QUANTIZE / TIME	Set snap grid (or note length in Step Input).
METRO	Toggle the click.
OPTIONS	Open Bass Record Options.
ARM	Prime capture; becomes STOP once recording.
APPLY	Commit (after STOP).
BACK / CANCEL	Exit without committing.

The same after-stop loop applies: PLAY to audition, RETRY to start again, OPTIONS to retune capture settings, APPLY to write the captured phrase into the Bass Track.

A safety detail: as with Melody capture, applying a fresh Bass capture **resets the Lock parameters to OFF** - so what you just played is what plays back, uncoloured by old Lock settings.

Track Parameters

Press **PARAMS** to open the Bass Track parameters menu. The categories are the same as elsewhere on UNA, with one key difference: instead of Stepper categories, the Bass Track has an **IMPROV** category (since bass evolves via Improv rather than per-step editing).



- **PRIMARY** - the parameters that affect individual notes and steps: OCTAVE, CHANNEL, DELAY, LAYERS, GATE, VELOCITY, PITCH, SLICE, plus the toggle-style parameters MODE, DELAY TYPE, VOICE MODE, SLICE TYPE.
- **SECONDARY** - the parameters that affect the sequence as a whole: STEPS, ROTATE, JUMP, DIRECTION, TIME, MUTES, ACCENTS.
- **LOCKS** - OCTAVE, NOTE, CHORD (the same override layer as the other tracks - see Chapter 8).
- **IMPROV** - the 9 Improv parameters, the same values you also set on the dedicated Improv page via IMPROV on the main Bass Mode screen.

Quick shortcut: you don't have to scroll to reach a parameter. **Press a PARAMETER Knob (1-8)** to jump the menu highlight straight to that knob's parameter - press a PARAMETER knob for the primary, or press and hold CONTROL + a PARAMETER knob for the secondary.

For a full reference to every parameter - what it controls, its range, and its default - see **Chapter 7 - Track Parameters**.

The Lock controls

Bass has the same Lock controls as the other tracks:

- **LOCK > OCTAVE** pins the octave
- **LOCK > NOTE** overrides the root pitch class
- **LOCK > CHORD** overrides the chord intervals the bass picks from.

Chapter 8 has the deep dive; everything there applies identically to Bass.

Lock-param edits take effect immediately (the change happens on the next tick, not the next chord change), so you can tweak Lock settings while the bass is playing and hear the result in real time.

Worked Recipes - for Bass

The "get a bassline in 10 seconds" recipe. From Performance, BASS → LOAD → press CATEGORY, rotate to LATIN → press PRESET, rotate to BOSSA. Listen - you're auditioning. APPLY. The Bass Track is now playing a bossa.

The "make it breathe" recipe. From the bassline above, press IMPROV. Set PROBABILITY (CONTROL Knob) to about 40 - that's roughly how often a step will deviate. Set PITCH (Knob 1) to 20 for a small, gentle drift. The bass will start sliding to nearby scale note on around 40% of its hits - still grounded, but no longer mechanical. Raise PITCH for bigger leaps, PROBABILITY for more frequent ones.

The "play your own" recipe. BASS → CAPTURE. Make sure INPUT MODE in OPTIONS is Realtime. ARM. Play the bass line on your keyboard. STOP. APPLY. The Bass Track now plays what you played; apply Improv on top of it for variation.

The "pedal-point" recipe. Build any chord chain. Enter BASS → PARAMS → LOCK → NOTE → set to D (or whichever pedal note you want). The chord chain moves; the bass stays anchored on D regardless; a "Pachelbel-style" pedal harmony in seconds.

What's next

Chapter 12 (Modulate) pairs well with Bass: a Modulate slot pointed at one of the Improv parameters will sweep that value up and down over time, giving you a bassline whose variation grows and recedes naturally across a section. Chapter 8's Lock deep dive is also worth a read.

Chapter 12 - Modulate

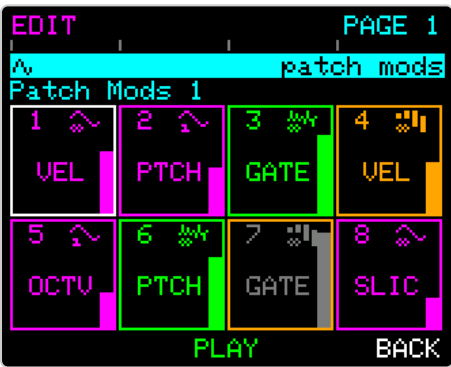
Modulate is where UNA moves.

Chord Mode gives the piece its harmony; Melody and Bass give it its shape and lines. Modulate is where those pieces stop being static and start to *evolve* - a filter that swells over 8 bars, a groove that mutates every pass, an accent that fires when you quick press a control in the middle of a chorus, a mod wheel on your keyboard that reaches inside a track and reshapes it live.

The mechanism is simple: a **Modulator** takes a **source** and points it at a **target**. That's the whole model. Everything else in this chapter is choosing the source, choosing the target, and shaping how strongly and how often the modulation happens.

Getting in and out

From Performance Mode, press **MODULATE**.



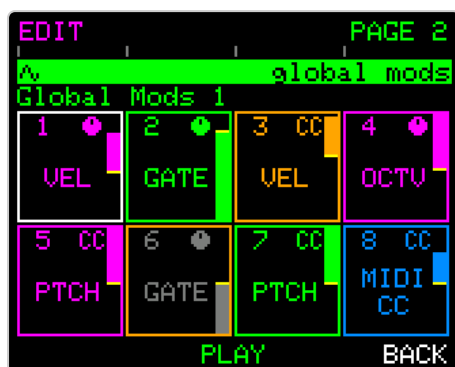
The page shows the current 8 Modulators - either the patch page (Mod 1–8 in cyan) or one of the two global pages (Global Mod 1–8 or 9–16 in green). The 8 **PARAMETER Knobs** each correspond to one of those displayed 8 Modulators.

EDIT		PAGE
	PLAY / STOP	BACK

- **EDIT** - opens the selected Modulator's edit page, where you pick its source, target, and settings.
- **PAGE** - cycles through the three pages: patch → global 1 → global 2 → patch. The label colour tells you which page you're on (cyan for patch, green for global).
- **PLAY / STOP** - the transport.
- **BACK** - return to Performance.

CONTROL Knob rotate picks a Modulator within the current page (Modulators 1–8).

Two kinds of Modulator - patch and global



UNA gives you 8 Modulator slots per patch, plus 16 global modulators:

- **Patch Modulators (8 slots, coloured cyan)** save with the patch. They belong to a song, an arrangement, a specific moment. Switch patches and the Patch Modulators switch with you. These are your **song tools**.
- **Global Modulators (16 slots on two pages, coloured green)** shared across every patch. Switch patches and they keep running. These are your **studio tools** - the slow evolution that shapes a whole set, the live-controlled CC output that always drives your outboard reverb, the manual macro you keep on hand for the whole session.

Both kinds behave identically under the hood - same sources, same targets, same gestures. The only difference is scope. A Patch Modulator lives in this patch; a Global Modulator lives on the unit.

- Patch Modulators can target another Patch Modulator or any Global Modulator;
- Global Modulators can only target other Global Modulators.

This rule prevents circular loops from forming, and it means the studio setup doesn't accidentally depend on which patch or bank is loaded.

The performance gestures

Before we get to editing, three gestures that make Modulators feel like a performance instrument rather than a menu structure. These all happen right on the Modulation page - no drilling into edit sub-modes.

- **Quick press a PARAMETER Knob.** Fires the corresponding One-shot Modulator for one Rate period. Great for "chorus is coming, punch it now" moments.
- **Hold a PARAMETER Knob.** A One-shot Modulator that you *hold* keeps looping past its natural end - one period, another period, another - until you release. When you release, UNA plays out the remainder of the current period, then stops cleanly. So a held knob gives you a sustained fill;

letting go lands it musically at the next period boundary. (If the Modulator is set to Continuous, quick press and hold do the same thing - it's already running.)

- **CONTROL + PARAMETER Knob press.** Toggles that Modulator between Continuous and One-shot, in place. UNA doesn't restart the modulation - the phase is preserved, so you can flip mid-modulation without a jump.
- **CONTROL + PARAMETER Knob rotate.** *Temporarily* changes that Modulator's Amount, live. Release CONTROL and the Amount snaps back to whatever was stored. The on-screen Amount bar tracks the held value so you can see what you're doing. Great for a "push harder for this chorus, then back off" gesture without permanently editing the patch.

These four gestures cover most live use. You'll spend most of your Modulator work in the edit pages below; you'll spend most of your Modulator *play* in these four gestures.

The Modulator anatomy

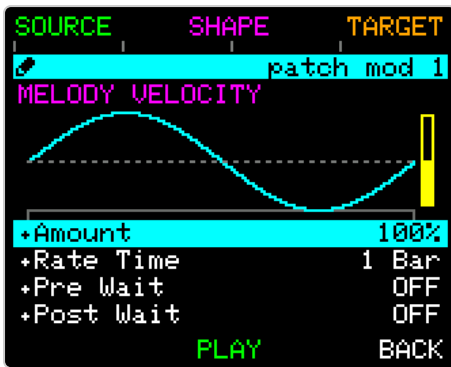
Every Modulator has these ingredients:

- **A source** - what generates the modulating value. UNA has six of them, covered below.
- **A target** - what the Modulator moves. Can be any parameter on any track or sub-mode (including another Modulator's parameters), or a MIDI CC output that leaves UNA and drives your outboard gear.
- **An amount** - how much the source pushes the target. 0 is no effect; higher amounts push the target further from its base value.
- **A rate** - how fast the source cycles (for time-based sources).
- **A mode** - Continuous (runs forever) or One-shot (fires once when triggered, runs for one Rate period, then stops).

One Modulator moves one target. To modulate several parameters together, use several Modulators - they can share the same source, so a single "master swell" wave can drive Melody pitch, Chord layers, and CC-mapped delay on an outboard reverb, all locked in phase.

Editing a Modulator

Select a modulator using CONTROL, then press **EDIT**.



UNA opens **Modulator Edit**, showing the Modulator's current target in the header and its parameters listed below.

The control layout depends on which source is active, but the top-level shape is:

SOURCE	(source-specific)	TARGET
(varies)	PLAY/STOP	BACK

- **SOURCE** - opens the source picker.
- **The source-specific control** - opens the current source's own configuration page. Its label matches the source: SHAPE for Waveform, SEED for Random, SEQUENCE for a Stepper source, ASSIGN for MIDI CC, and so on.
- **TARGET** - opens the target picker.
- **APPLY** - commit changes.
- **CANCEL** - discard and return.

Editing the parameters

The bottom half of the screen is the parameter list.

Rotate CONTROL to select; **press and rotate CONTROL** to edit the selected value.

The row set depends on the current source - a time-based source (Waveform, Random, Time Sequence, Step Sequence) shows the full set; a static source (Macro, MIDI CC) hides unrelated parameters.

For **time-based sources**:

- **Amount** - how strongly the source pushes the target. 0–200%. 100% is the source's natural depth; below cuts back, above pushes past the natural range (and clips against Min/Max if a range is set).
- **Rate Time** - how long one full cycle of the source takes. $\frac{1}{4}$ Bar $\rightarrow$ 16 Bars, tempo-locked. Default 1 Bar.
- **Steps** - the length of this Modulator's step lane, 1–32. Only shown for **Time Sequence** and **Step Sequence** sources; edits the Modulator's own stepper lane directly.

- **Pre Wait** - insert time **before** the modulation begins. The target sits at its resting value for this long, then the source begins. OFF → 16 Bars.
- **Post Wait** - insert time **after** the modulation Rate time period completes. Sits between mode rate cycles in **LOOP** mode; holds after the fire in **1-SHOT** mode. OFF → 16 Bars.
- **Range Max** - upper limit the source can push the target to, shown in the target's own units (e.g. 127 for velocity, +7 for octave). OFF disables the ceiling, falling back to the target's own maximum value.
- **Range Min** - lower limit, same units. OFF disables the floor, falling back to the target's own minimum value.
- **Range Span** - how the shape maps between the current value and those limits. **MIN** → **MAX** swings bipolar (full source, centred on the current value); **VAL** → **MAX** pushes only upward; **MIN** → **VAL** pulls only downward.
- **Mode** - Sets the modulation behaviour.
- **LOOP**: runs forever while Enabled
- **1-SHOT**: fires once per arming, then disarms itself and awaits re-enable (Switching to 1-SHOT automatically disables the Modulator so you can arm the next fire deliberately).
- **Enabled** - **ON** / **OFF** for this Modulator. (Also toggled by quick pressing the corresponding PARAMETER Knob on the Modulation page).

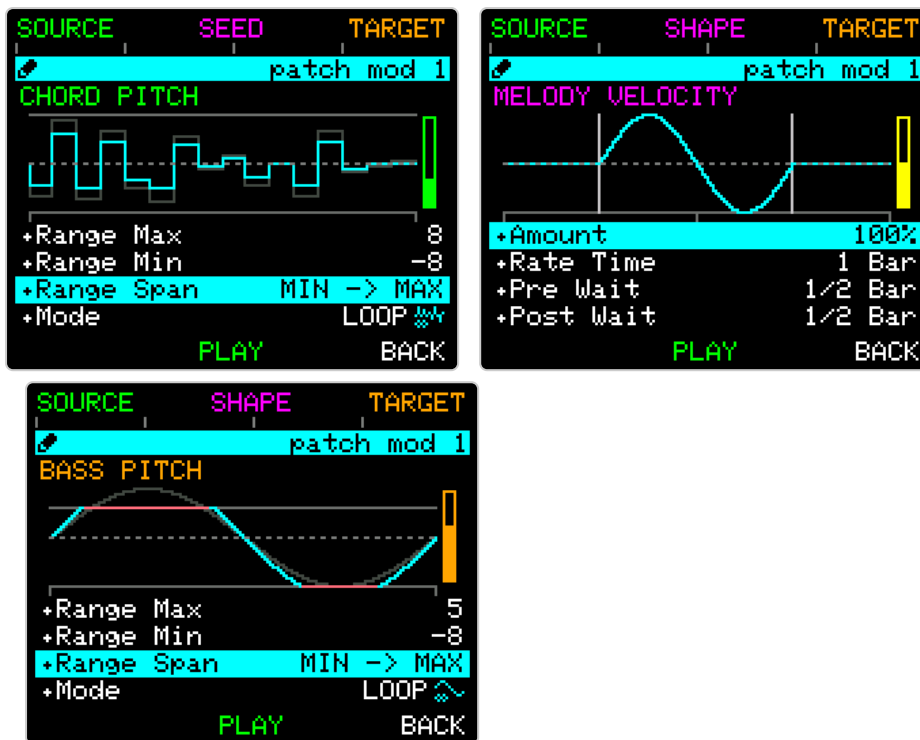
For **Macro** and **MIDI CC** sources, only four rows are shown - Rate, Waits, Span and Mode are hidden because a static offset has no time-based shape to phase or gate:

- **Amount** - the raw target value the macro / CC is currently set to, in the target's own units. On Macro it moves when you turn the Modulator's knob; on MIDI CC it's read-only and driven by the last incoming CC value.
- **Range Max** - upper limit the macro / CC can reach on the target.
- **Range Min** - lower limit.
- **Enabled** - **ON** / **OFF** for this Modulator.

The Modulator Edit diagram

The top half of the screen draws a live picture of what this Modulator will do to its target - the shape, the timing, the amount, the range, and where they interact.

Every row you edit updates the diagram in real time.



Five elements make up the picture:

- **The shape trace.** The main coloured line - the source's actual output at its current settings.
- For **Waveform** it's the LFO curve; for **Random**, **Time Sequence** and **Step Sequence**, the step pattern. For **Macro** and **MIDI CC**, an icon and the live incoming CC value.
- **The dark-grey reference shape** sits behind the coloured trace and shows the source at 100% Amount and full Span, ignoring Range.
- It's a design aid - no matter how much you cut Amount or squeeze Range, you can always see the shape you picked.
- **The Min / Max range lines** are the horizontal grey lines across the diagram, positioned in the target's own units.
- The active modulation shape is clamped between them. Where the coloured trace hits one of those limits it turns **RED**, so you can see where the modulation has reached the range limits.
- **The Amount bar** on the far right shows the amount of modulation currently applied.
- On Macro / MIDI CC it shows the deviation relative to the target's current base value.
- **Pre and Post Wait** periods appear as flat lines on either side of the shape, sized proportionally to their bar counts.
- Faint vertical dividers mark the pre|active and active|post boundaries.

Below the trace, a row of grey markers spans the full cycle; one per bar. Useful for reading the length of a slow cycle at a glance.

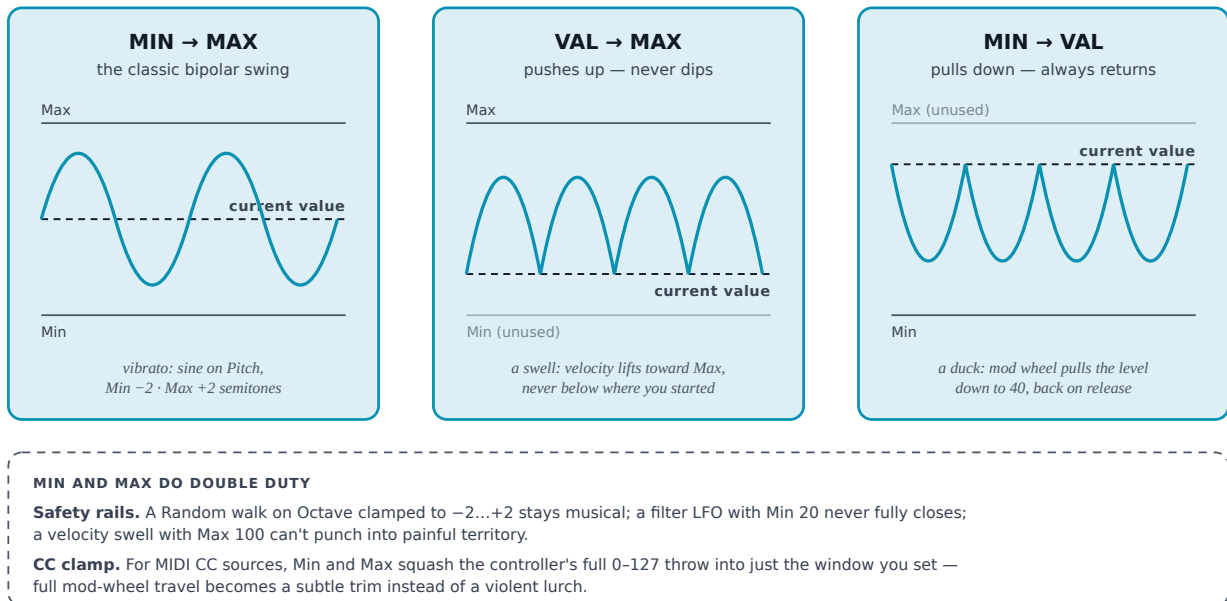
Highlighting. Whichever parameter you have selected, in the list, lights up in **YELLOW** on the diagram.

Modulation Range - SPAN, MIN, and MAX

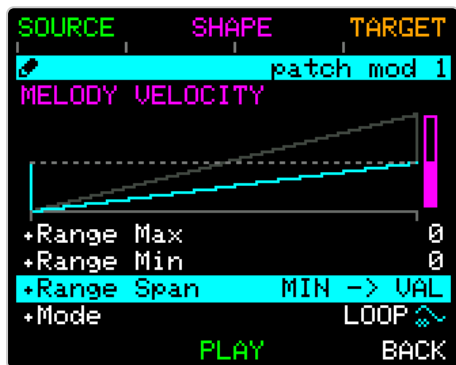
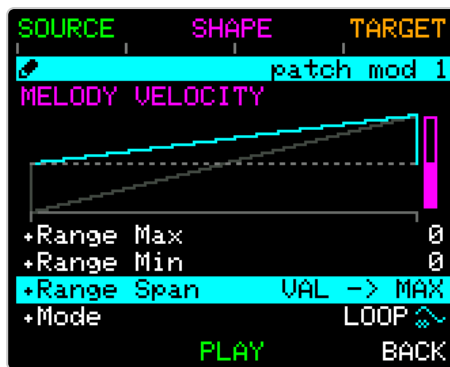
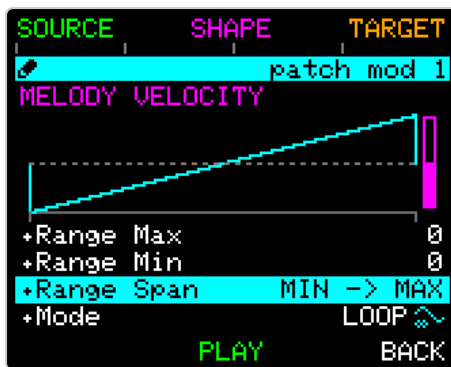
Range Span decides which *direction* the shape pushes the target from its current value; Min and Max decide *how far* it can go. Two small levers - but together they turn a raw source into something musical.

Range Span: which way does it push?

Span picks the direction relative to the current value. Min and Max decide how far it's allowed to go.

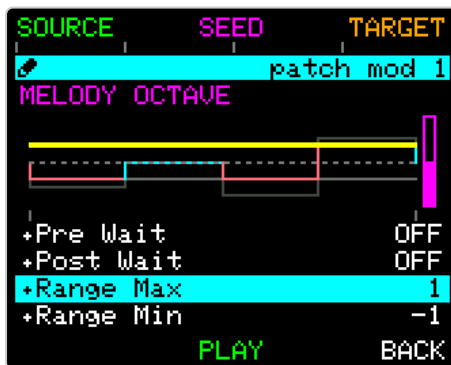


- **MIN → MAX** is the classic bipolar swing: the shape moves the target both above and below the current value.
- Sine on Pitch with Min = -2 semitones, Max = +2 gives you a subtle vibrato either side of the note; an LFO on filter cutoff (via CC) with Min = 40 and Max = 100 swings across those two values around wherever the knob currently sits. This is what most people mean when they say "LFO on a parameter".
- **VAL → MAX** only ever pushes *up* from the current value.
- A velocity swell that lifts your current dynamic toward Max but never drops below where you started; a reverb send that opens up into the chorus but never mutes; a slow rise that crescendos and doesn't retreat.
- **MIN → VAL** only ever pulls *down* from the current value.
- A "duck" on velocity level, mod wheel at rest sits at 100, holding pulls it down to 40 and back on release.



Min and Max as safety rails. Even with the classic MIN → MAX swing, tight range limits keep an adventurous source under control.

- A Random modulator on Octave will walk anywhere from -10 to +10 if you let it - set Min = -2, Max = +2 and the walk stays inside a musical band.
- A filter LFO with Min = 20 will never fully close, so even at minimum Amount you don't drop into sudden silence.
- A velocity swell with Max = 100 gives you a comfortable ceiling so the source can't ever punch through into painful territory.



Min and Max as a CC mapping clamp. For MIDI CC sources, Min and Max squash the incoming CC's full 0-127 travel down into just the window you set.

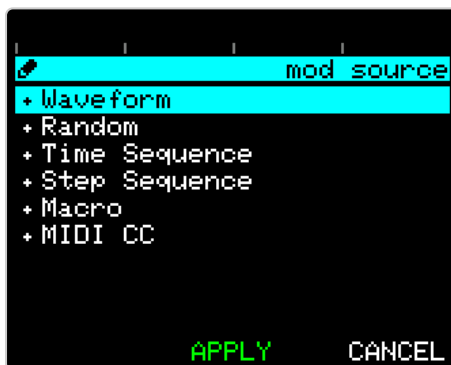
- Set Min = 45, Max = 75 on a velocity target and full mod-wheel travel now feels like a subtle trim rather than a violent lurch.
- Set Min = 30 on a filter cutoff target and no matter how far you push the wheel back, the filter can't ever fully close.

Any incoming CC stays inside the window you define, and the target parameter can't leave that window regardless of what your controller sends.



Choosing a source

Press **SOURCE** from Modulator Edit.



UNA opens the six-option source picker.

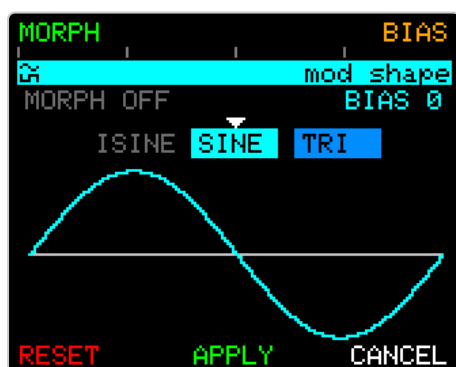
Source	What it does
Waveform	LFO-style time-based modulation. A shape (sine, triangle, saw, square, and 12 more) sweeps the target back and forth at your chosen Rate.
Random	Steps to a random value on every cycle. Great for organic, human-like variation.
Time Sequence	A 32-step pattern of values spread evenly across the Rate period. Sequenced modulation on a timeline.
Step Sequence	A 32-step pattern locked to the target track's step timing - advances one value per sequencer step, whatever the track's Time setting is. Sequenced modulation locked to the music.
Macro	A static offset value that you set by hand. Doesn't move on its own; moves when you turn the Modulator's Amount knob. Useful for "give me a manual filter knob mid-performance."
MIDI CC	Driven by an external MIDI source - a CC number, a mod wheel, aftertouch - that you assign via MIDI Learn. What you play on your keyboard reshapes what UNA plays.

Rotate the CONTROL Knob to select from six sources; press APPLY to commit.

The rest of this section covers each source type's own config page.

Waveform

Press **SHAPE** in Modulator Edit when Waveform is the source. UNA opens the shape editor.



Sixteen base shapes are available: SINE, TRI, BELL, LOG, SAW, EXP, SQUARE, HIGH, LOW, and their inverses.

- Rotate the CONTROL Knob to browse (the current shape draws live so you can see what you're picking).

Two extra controls sit alongside the shape picker:

- Quick press **MORPH** and rotate the CONTROL Knob to blend the current shape into the next one. So SINE morphed 40% toward TRI is a triangle-ish sine, midway between the two.

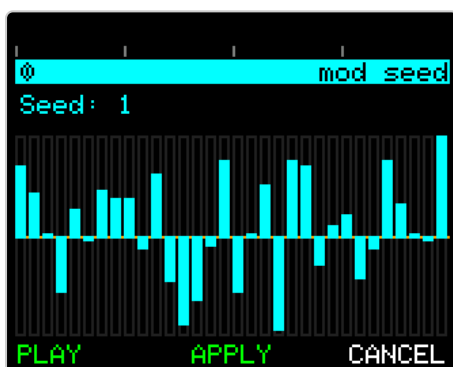
- Quick press **BIAS** and rotate the CONTROL Knob to shift the phase of the wave. Push it forward to have the wave land its peak earlier in the cycle.

MORPH and BIAS can both be toggled with a quick press, or press and hold + rotate CONTROL to quick change without toggling.

- **RESET / REVERT** works the same way as elsewhere in UNA: press to snap back to the entry state, press again to bring your edits back.
- **APPLY** commits;
- **CANCEL** discards.

Random

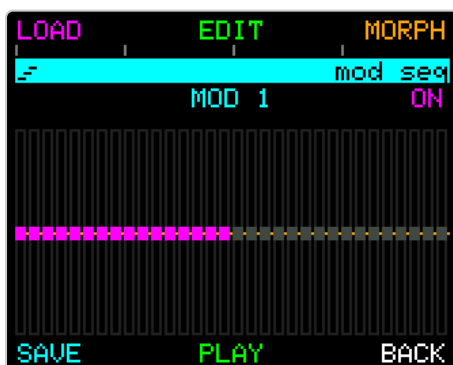
Press **SEED** when Random is the source. UNA opens the seed picker.



Each of the 256 seed values produces a deterministic sequence of random values: same seed → same sequence, every time.

- Rotate the CONTROL Knob to browse seeds; the modulation previews live as you scroll.
- APPLY commits.

Time Sequence and Step Sequence



Both stepper sources share the same editor - press **SEQUENCE** in Modulator Edit. UNA opens a familiar-looking screen: the same 32-step editor as the Melody Stepper (Chapter 10).

Because it's the same machinery, the control layout matches:

LOAD	EDIT	MORPH
SAVE	PLAY / STOP	BACK

Everything Chapter 10 says about editing a Stepper lane applies here:

- rotate CONTROL to pick a step
- press-and-rotate to change its value
- MULTI for block selection
- RESET/REVERT as the safety net

The difference between the two source types is *when the pattern advances*:

- **Time Sequence** spreads the step pattern evenly across the Rate period. Set Rate to 4 bars and the pattern walks slowly; set it to 1 bar and it walks four times faster.
- **Step Sequence** advances with each step made by the target track. No Rate - the pattern is locked to the music. Set the modulator to 16 steps and the pattern cycles every time the target track has advanced 16 steps.

Time Sequence is for modulation that lives on its own timeline. Step Sequence is for modulation that stays married to the rate of the music.

Macro

Macro has no dedicated editor page - the Modulator's own Amount value *is* the Macro's output. Turn the Modulator's Amount knob and the target moves; leave it and the target holds. It's a manual offset with no automation on top.

Useful for creating an on-the-fly "filter knob," a "pitch bend," or any parameter you want to sweep by hand mid-performance.

Assign a Macro Modulator to a target parameter, and now that PARAMETER Knob has become a manual controller for the target - even in Performance Mode, without drilling in.

Because a Macro is static rather than time-based, it only presents four options: **Amount**, **Min**, **Max** and **Enabled**.

A Macro nudges the target; it doesn't seize it. When you arm a Macro, UNA remembers the target's value at that moment, and from then on the Macro applies the *difference* between the Amount knob and that remembered value.

The offset rides on top of whatever the target is currently doing. So if the underlying parameter changes (you edit it, or another Modulator sweeps it) your Macro offset follows along rather than overriding it.

Min and Max fence the result. They set the working range for the target, and the value the Macro produces is held inside it.

On the edit page, a Macro's **Amount** doesn't show a percentage like the other sources. It shows the value the target will actually become, in the target's own units, because that's the number you care about when you're using a knob as a hand controller.

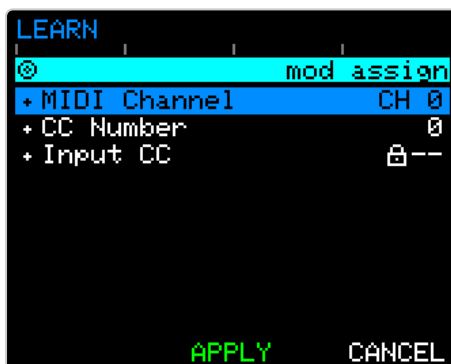
MIDI CC

MIDI CC behaves in the same manner as a Macro but is driven by an external source. The Modulator Amount is driven by an incoming CC, rather than by your fingers on the knob.

Its edit page is the same short one: Amount, Min, Max, Enabled.

Min and Max matter more here, because they're what stop a controller's full 0–127 sweep from throwing the target to its extremes.

Press **ASSIGN** when MIDI CC is the source. UNA opens the MIDI CC assignment page.



- **MIDI Channel** - which channel to listen on (1–16).
- **CC Number** - which CC number to react to (0–127; mod wheel is 1, aftertouch varies).
- **Input CC readout** - a live display of the CC value currently coming in.

You can press:

- **LEARN** to arm MIDI Learn.
- Move a controller on your MIDI setup (mod wheel, aftertouch, a slider) and UNA fills in the Channel and CC Number automatically. This is the fastest way to hook a live controller to a UNA parameter.
- **APPLY** commits.
- **CANCEL** discards.

Worked example - Mod Wheel to Melody Pitch

MIDI Learn lets you assign a controller to an UNA parameter without knowing its CC number in advance.

To put your mod wheel on the Melody Pitch:

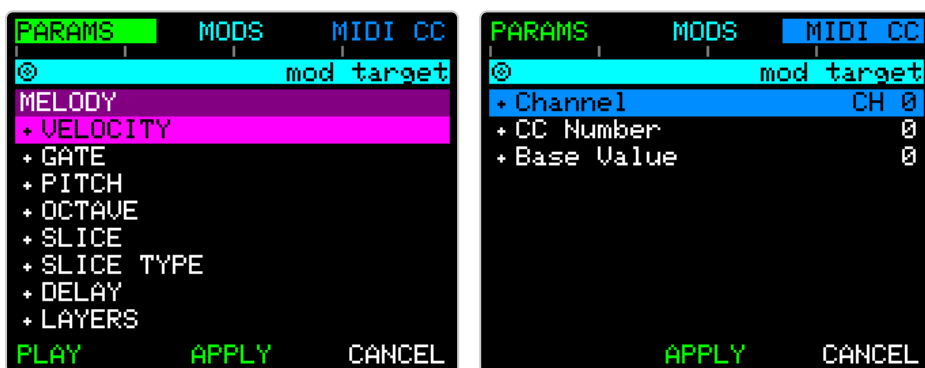
1. From Performance, press **MODULATE**, then **EDIT** on an unused Modulator.
2. **SOURCE** → **MIDI CC** → **APPLY**.
3. **ASSIGN** → **LEARN** → move your mod wheel. UNA fills in the Channel and CC number automatically.
4. **TARGET** → **PARAMS** → find Melody Pitch → **APPLY**.

Your mod wheel now controls the pitch live.

Note. There are no hardcoded CC mappings for UNA's Track parameters. Routing a CC through a Modulator, as above, is the way to do it.

Choosing a target

Press **TARGET** from Modulator Edit. UNA opens the target picker.



PARAMS	MODS	MIDI CC
PLAY / STOP	APPLY	CANCEL

Targets are organised into three categories:

- **PARAMS** - every parameter across every track and sub-mode.
- Melody, Chord, and Bass parameters, all 8 Stepper parameters per track, and their morph/rotation/length values. If UNA has a parameter, it can be targeted here.
- **MODS** - Modulator Amount targets. Pick another Modulator here and this Modulator will move *its* Amount.
- The forward-reference rule applies: Patch Modulators can pick any earlier Patch Modulator; Global Modulators can only pick earlier Global Modulators. Targets that would form a loop are hidden.

- **MIDI CC** - CC output.
- Opens a nested config sub-page where you pick the output channel, CC number, and base value the Modulator will send.

To use this page:

- Rotate the CONTROL Knob to walk the list within the current tab;
- Hold-and-rotate to jump between category groupings.
- APPLY commits
- CANCEL discards.

Each target previews live as you highlight it. You'll hear the modulation start affecting the highlighted target before you commit.

Continuous vs One-shot

Every Modulator has a **Mode** setting:

- **Continuous** - the Modulator runs forever.
- Waveforms cycle. Random re-rolls. Steppers loop. This is the default for "modulation that's always alive."
- **One-shot** - the Modulator waits for a trigger, then fires for one Rate period, then stops.
- Waveforms complete one cycle. Random rolls once. Steppers walk their pattern once. Great for fills, drops, and drama.

You can toggle Mode via **CONTROL + PARAMETER Knob press** on the Modulation page, or by editing the Mode row in Modulator Edit.

There are 2 ways to trigger a One-shot, using the PARAMETER Knobs:

- Quick Press for one period
- Press and hold for a sustained loop that runs out the cycle on release.

Modulator-of-modulator

The MODS tab in the target picker lets a Modulator target another Modulator's Amount.

A slow Modulator on one Modulator's Amount is a "conductor" that shapes how strongly the target modulator affects its own target. A slow Waveform pointed at a fast Waveform's Amount gives you a fast tremolo whose *depth* rises and falls over 8 bars - you get subtle motion at first, dramatic motion at the peak, subtle again as the outer wave falls.

Worked Recipes - for Modulators

The "slow sweep" recipe. Enter Modulate. Pick Mod 1. EDIT → SOURCE → Waveform → APPLY. SHAPE → pick SINE, APPLY. Back in Edit, set Rate to 4 bars, Amount to about 60%. TARGET → PARAMS → pick a track's parameter, e.g. Melody Pitch . APPLY. Set Mode to Continuous. Now the value changes slowly across every four bars.

The "one-bar fill" recipe. Mod 2. EDIT → SOURCE → Waveform → SAW rising. Rate = 1 bar. Amount = high. TARGET → e.g. the Chord Track's Layers parameter. APPLY. Set Mode to One-shot. Now quick press PARAMETER Knob 2 when you want a chord swell fill; hold it if you want the swell to loop until you release, then land cleanly.

The "evolving groove" recipe. Mod 3. Random source. Rate = 1 bar. Amount = low (20%). TARGET → Melody Track's Velocity. APPLY. Continuous mode. The Random source draws one value per step and reseeds at each cycle boundary, so the same pattern of step values repeats every Rate cycle. With Rate = 1 bar over a 4-step bar, you get four small velocity nudges that loop bar after bar - a static groove becomes a consistent played groove. Lengthen the Rate to fit more distinct steps before the pattern repeats; change the Seed to audition a different pattern.

The "conductor" (modulator-of-modulator) recipe. Mod 1 is a fast Waveform (Rate = $\frac{1}{8}$ note) targeting Melody Pitch - a fast trill. Mod 2 is a slow Waveform (Rate = 8 bars) targeting Mod 1's Amount. Now the trill moves over time - subtle at the start of every 8 bars, dramatic in the middle, subtle again at the end. You're modulating the modulator.

The "mod wheel to parameter" recipe. Mod 4. SOURCE → MIDI CC. ASSIGN → LEARN → move your mod wheel - UNA fills in Channel and CC number. APPLY. TARGET → PARAMS → pick a Track parameter. Now your mod wheel modifies the parameter live.

The "CC LFO/control your synth" recipe. Mod 5. SOURCE → Waveform (any shape and rate). TARGET → MIDI CC → set the output channel to whichever your outboard synth is on, set the CC number to whatever that synth's filter cutoff CC is. APPLY. Now UNA is driving your outboard synth's filter as if it had a built-in LFO. Combine with the "master swell" recipe to modulate outboard gear in phase with UNA's internal parameters.

The "studio tool" recipe. Press PAGE to select the Global Mods. Configure Global Mod 1 with a slow Waveform that drives a MIDI CC to your outboard reverb's decay time. Rate = 256 bars. Now every song/patch you engage carries this same slow reverb drift, that gets longer as the set progresses. Set once; forget about it for the rest of the show.

What's next

The Stepper (Chapter 10) is Modulate's natural companion - Modulate can drive Stepper parameters like Rotation or Length, meaning a static Stepper pattern can be made to *walk* through variations without your ever entering EDIT.

Chapter 15 (MIDI) covers UNA's MIDI plumbing in detail - worth reading if the MIDI CC source or MIDI CC target got you interested in wiring UNA into a bigger MIDI rig.

System

Chapter 13 - Metronome & Timing

Tempo, time signature, and metronome - determining the playback speed and audible guidance during recording.

Tempo

UNA's tempo range is **1-300 BPM**, with a default of **120 BPM**.

Tempo is a device-wide setting, so stays put as you switch patches. There's only one tempo for the whole unit; every track and Modulator runs against it.

Setting tempo on the unit

Tempo lives on **PARAMETER Knob 1** as its secondary parameter. So the gesture is:

- **Press-and-rotate PARAMETER Knob 1** to change tempo.

This works from anywhere the standard track-parameter behaviour is active. The display shows the new BPM value as you rotate.

Setting tempo from an external source

External MIDI clock.

With MIDI Clock set to IN (Chapter 17), UNA's tempo follows whatever your DAW or drum machine is sending. Your local tempo edits are ignored while external clock is present.

Time signature

UNA supports four time signatures: **4/4**, **3/4**, **2/4**, and **6/8**. 4/4 is the default.

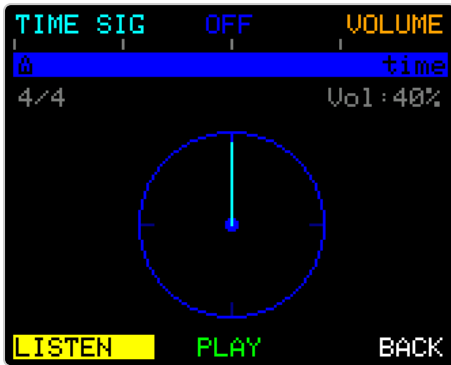
Time signature is a device-wide setting.

The time signature affects how UNA groups steps into bars - how the metronome click accents downbeats, where the position bar on the Performance display shows its major divisions. However, it does not impact the number of steps an individual track plays per bar, this is independently set by the Track's **Time** parameter.

Change the time signature from the Metronome page (Chapter 6):

1. From Performance, quick press the CONTROL Knob to open the Control space, then press **METRO**.
2. Press **TIME SIG** to arm the setting.
3. Rotate the CONTROL Knob to step through the four options.

4. Press **TIME SIG** again to deselect (or **BACK** to leave).



The metronome click

UNA's metronome plays audible clicks through the built-in piezo buzzer on the unit. It's a hardware feature - no separate audio output required - and it's independent of the MIDI outs, so the click stays in the room without leaking into your recording. The first beat of the bar is accented.

- From the Metronome page, press **ON / OFF**.

Count-in and recording

The Record pages, across UNA, all offer a **METRO** toggle inside their pre-record screens.

Turn it on and UNA gives you a one-bar count-in click before recording starts; useful for playing in time without needing the main click running all the time.

This record-metronome toggle is **its own setting**, separate from the main metronome, and it's remembered across all the record screens. Switching it on before a take doesn't leave the main click running afterwards.

External clock - how UNA follows

When MIDI Clock is set to IN (Chapter 17), UNA follows external MIDI clock. A few things happen:

- The tempo display reflects the incoming clock - you don't need to match it manually.
- Your Knob 1 press-and-rotate tempo edit is ignored while external clock is present.
- UNA takes clock from whichever source starts sending first (USB-C, USB Host, or TRS In). Others are ignored until the active source goes silent.

Chapter 16 covers the full external sync behaviour, including Start / Stop / Continue handling and multi-device routing.

If external clock disappears

UNA doesn't have a dedicated watchdog for external clock loss. If the master stops sending clock mid-play, UNA continues at its last-received tempo until Stop arrives or you press Stop manually. That means a briefly-glitched clock won't derail UNA, but a dead master will leave UNA running at the frozen tempo - worth knowing if you're relying on your DAW.

Cross-references

- **Chapter 6** - Metronome page access and the surrounding UI.
- **Chapter 16** - External clock and Sync in detail.
- **Chapter 17** - the MIDI Clock and MIDI Transport Globals (each IN / OUT / OFF).

Chapter 14 - Patches & Banks

A **patch** is a complete snapshot of everything you've built - the chord chain, the rhythms, the captured melody, the bass line, every track parameter, every Stepper lane, every Modulator. Load a patch and the unit is exactly as it was when you left it.

Switch to another patch within the same bank mid-performance and UNA crosses over seamlessly. This chapter covers what a patch contains, where it lives, and how to organise the patches you build into a library you can play from on stage.

What's in a patch

A patch holds everything that makes the music *this music*:

- The **chord chain** - your captured progression.
- The **chord rhythm** - the pattern that delivers the Chord Track.
- The **Melody Track** - every step's pitch, gate, velocity, and per-step parameters, plus all 16 Melody parameters.
- The **Bass Track** - its captured or generated bassline, plus all 16 Bass parameters and the full Improv configuration.
- All patch **Modulation** slots - each one's type, target, and timing settings.
- All Stepper lanes for Melody.
- Track mute state - but only if you've switched **Menu > CONFIG > Track Mutes** to *Per Patch*. By default mutes are device-wide and live outside the patch (Chapter 17).
- The patch **name** - up to 12 characters.
- The **MIDI Channels** - as set via the mixer. Unless you've switched **Menu > CONFIG > Track Channels** to *Global*, in which case the three channels are device-wide and the patch's stored channels are ignored (Chapter 17).

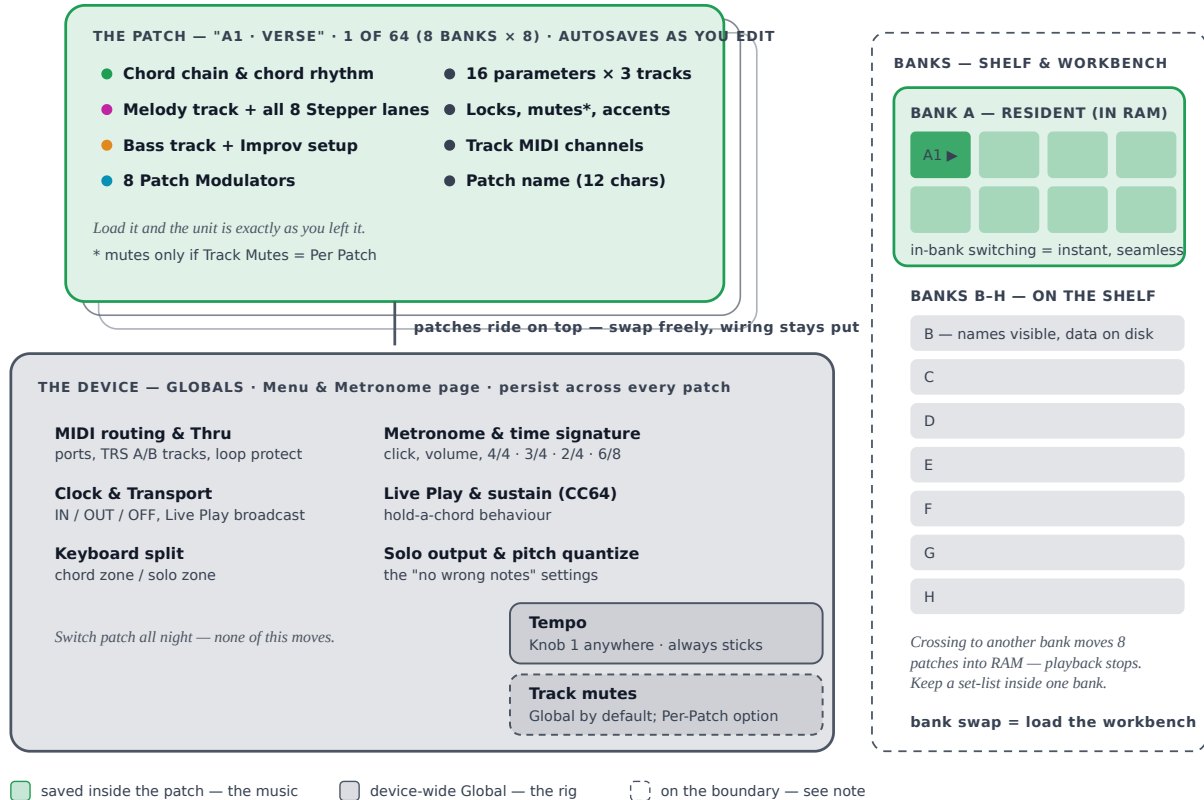
A patch does **not** include:

- **MIDI routing** - port enables, Thru behaviour. Those are Globals.
- **Keyboard split** - also a Global.
- **Tempo** - UNA's tempo is a single device-wide value that persists across patches.
- **Clock and transport, Live Play, and the metronome** - time signature, click, volume. All Globals.
- **Track mutes** - by default. Set **Menu > CONFIG > Track Mutes** to *Per Patch* if you'd rather each patch remember its own (Chapter 17).
- **Track channels** - if **Menu > CONFIG > Track Channels** is set to *Global* (Chapter 17).

This split is intentional. The patches you switch between mid-set should change the *music*, not the *wiring*. If you have your MIDI rig set up so Out A goes to your synth and Out B goes to a drum machine, you don't want a patch change re-routing your cables. Globals stay put; patches move freely on top.

Patches carry the music. The device carries the rig.

A patch change should change the song — never the wiring. That's why the split exists.



Banks and slots

UNA stores patches in **banks of 8**. Banks are named by letter - **A** through **H** - and each holds 8 patch slots numbered 1–8, giving 64 patches in all. So a patch is always addressed by bank-and-slot: **A1** is the first patch in Bank A, **C5** is the fifth patch in Bank C, and so on.

Banks are folders. Use them however makes sense to you - by song, by set, by project, by instrument; they're just a way to organise your library.

Resident and browsed banks

UNA holds **one bank in RAM at a time** - the "resident" bank. When you're playing, you're playing patches from the resident bank; when you switch between patches within it, the swap is instant.

When you look at another bank, you're **browsing** it - UNA still knows all the patch names in every bank (they're read on boot), but the patch *data* only comes into RAM when you commit to a bank switch. This is why:

- **Loading a patch within the resident bank is instant.**
- **Loading a patch from a different bank stops playback**, loads the new bank into RAM, then loads the patch. UNA warns you before doing this.

So the mental model is: banks are your storage; the resident bank is what's on your workbench.

The factory patches

UNA ships with eight factory patches in Bank A - and, out of the box, the same eight in every bank. They are demonstrations *and* starting positions: each one shows a different side of UNA's sequencing, and each is built to be pulled apart. A factory reset (Chapter 17) reinstalls them.

All eight follow the same convention: **every track - Chords, Melody and Bass - sends on MIDI Channel 1**. Connect a single polysynth, electric piano, or any keyboard sound to UNA's MIDI out, set it to Channel 1, press Play, and every patch speaks through that one instrument. To keep three tracks legible on one sound, the dynamics and registers are deliberately spread: chords sit soft in the middle, the bass strong below, the melody brighter on top. (They were designed at the default 120 BPM - tempo is a Global, so it stays wherever you set it.)

Each patch also carries its **own chord chain**, already running, and a **full set of eight Modulators, pre-configured but switched off**. The modulators are the invitation to explore: open Modulate (Chapter 12), enable a slot, and something definite happens - a swell, a register jump, a bass that starts improvising. Enable them one at a time and listen; disable them and the patch returns to its plain self.

Slot 6 deserves a special mention: in every factory patch it is aimed at **Bass Improv Probability**. In the straighter patches it wakes the bass up; in the jazz patches it pushes an already-improvising bass further out.

A1 - FIRST LIGHT

A calm opening: a sustained pad, a small circling melody, a root-note bass.

- **Chords** - drone mode. The chain (C - G - Am - F, one bar each) sustains as a soft pad and re-voices on each chord change.
- **Melody** - an 8-step rise-and-fall in eighth notes, sitting above the pad with a gentle off-beat lift.
- **Bass** - roots only, in quarter notes, an octave below. Completely straight.
- **Modulators** - slow swells for melody and pad, occasional octave lifts, a breathing melody density, bass octave kicks, longer melody notes - and slot 6 to make the bass improvise.

A2 - POP ANTHEM

A driving pop groove: stabbed chords on every eighth, a hook of a melody, a bouncing bass.

- **Chords** - the doo-wop turnaround (C - Am - F - G) delivered as short stabs on straight eighths.
- **Melody** - an 8-step 16th-note hook with accented downbeats and a dotted feel.
- **Bass** - the BOUNCE preset in eighths. Straight and reliable.
- **Modulators** - four-bar velocity builds, register jumps, drop-in/drop-out melody steps, comp swells, a swing delay that pushes the comp off the beat, extra accents - and the bass improv switch.

A3 - NIGHT DRIVE

Minor and insistent: a tresillo chord rhythm, syncopated stabs, a driving bass.

- **Chords** - Am - F - C - G played as a 3-3-2 tresillo, short and percussive.
- **Melody** - 16 steps of syncopated stabs with tresillo accents.
- **Bass** - the DRIVE preset in eighths, straight and low.
- **Modulators** - ramping dynamics, random register jumps and thinning, a chord-rhythm displacement, bass octave kicks, a step-skipping Jump switch - and the bass improv switch.

A4 - SLOW BLOOM

Ambient: an eight-bar seventh-chord cycle, a melody that sweeps its whole range over four bars, a sparse ballad bass.

- **Chords** - drone mode over Fmaj7 - Cmaj7 - Am7 - Gsus4, two bars per chord.
- **Melody** - a full 32-step sweep in eighths, with tied, sustained notes and breathing dynamics.
- **Bass** - the BALLAD preset in long quarter notes.
- **Modulators** - everything on eight-bar tides: melody and pad dynamics, density, register drift, a pad that slowly re-voices itself, waves of bass note-length, occasional melody ornaments - and the bass improv switch.

A5 - TWELVE BAR

The blues. Twelve bars in E with a walking bass that already improvises.

- **Chords** - E7 - A7 - B7 through the classic 12-bar form, comped in quarter-note stabs.
- **Melody** - a question-and-answer phrase in 16ths with ghost-note dynamics.
- **Bass** - the WALKING preset in quarters, with a taste for improvisation already dialled in: it varies pitch, level and length as it walks.
- **Modulators** - swells and accents for melody and comp, phrase gaps, per-step bass level variation, a swing switch for the melody - and slot 6 turned up high: enable it and the bass takes a solo.

A6 - THE CANON

Pachelbel's progression, treated as a study: long descending melody, stately half-note chords, a bass that walks upward.

- **Chords** - the eight-chord Canon cycle in D, in sustained half notes.
- **Melody** - a 32-step tumbling descent in 16ths, legato, with a gentle swell.
- **Bass** - the WALK UP preset in quarters, straight.
- **Modulators** - a long crescendo, an instant second harmony voice (a Layers lift), direction flips that turn the descent on its head, chord swells, bass octave lifts, lengthening notes - and the bass improv switch.

A7 - HAVANA

Latin: son clave chords, a montuno-flavoured melody, a tumbao bass with loose timing.

- **Chords** - Am - Dm - E7 - Am comped on the 3-2 son clave.
- **Melody** - a pedal-tone-and-rise figure in 16ths with clave accents.
- **Bass** - the TUMBAO preset in eighths, already improvising a little in pitch, level and timing.
- **Modulators** - swells, register jumps, thinning, a rotate that flips the clave to 2-3, extra accents, looser bass timing - and slot 6 to push the improvisation harder.

A8 - AFTER HOURS

Late-night jazz: a ii-V-I, Charleston comping, and a bebop bass given real freedom.

- **Chords** - Dm7 - G7 - Cmaj7 comped on the Charleston rhythm, fading soft.
- **Melody** - a 32-step songlike line in 16ths with expressive ties, slides and scattered accents.
- **Bass** - the BEBOP preset in eighths with the heaviest improvisation of the bank: pitch, level, length, timing and octave all in play.
- **Modulators** - slow comp fades, sparser phrasing, register jumps, longer comp notes, a drunken-swing melody delay - and slot 6 at maximum: the bass in full flight.

Any of these can be overwritten - they are ordinary patches in ordinary slots. Copy one to a free slot before you dig in if you want to keep the original (Copying a patch), or get them all back with a factory reset.

Autosave - you never have to think about saving

UNA autosaves. Every parameter you change, every chord you record, every melody you capture is written to the current patch as you go. You don't have to remember a save gesture; you don't have to confirm before powering off. If you make an edit, it's saved.

Three practical consequences:

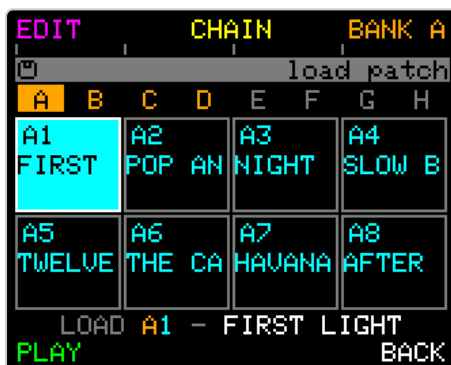
- **The patch you're on is always the current state of the unit.** Power-cycle UNA and it comes back exactly as you left it.
- **If you don't want to keep edits, copy the patch first.** Make a copy into a fresh slot, then experiment in the copy. The original stays untouched.
- **You can roll back to the patch's last-saved state via RESET.** Go to Patch Edit and press RESET - see below. This wipes the current session's edits and restores the patch to its saved state on disk.

The copy and reset mechanisms are covered below.

Patch Load - the grid browser

UNA's patch browser is reached from Performance Mode by **holding the CONTROL Knob and rotating it**. This drops you into **Patch Load**.

What's on the screen



The display shows a **4×2 grid** of the 8 patches in the current bank. Each cell shows:

- The patch's **tag** - the bank letter and slot number (e.g. **A1**, **A2** ... **A8**).
- The patch's **name**, truncated to fit the cell.

Two visual cues:

- The **currently-loaded patch** (the one playing) is drawn in cyan.
- The **selected patch** has a white border.

Selecting a patch

Two ways to move the selection around the grid:

- **Rotate the CONTROL Knob** - walks the 8 patches.
- **Press a PARAMETER Knob (1-8)** - jumps directly to that knob's associated patch.

The controls

Function	What it does
EDIT	Open Patch Edit for the highlighted patch (rename, reset, copy). Disabled while browsing a non-resident bank.
CHAIN	Opens Patch Chain mode; allowing you to automate patch changes and create song arrangements. See below.
BANK A (<i>the letter shows the current browsed bank</i>)	Quick press to engage bank-select mode; then use CONTROL Knob to rotate through banks. Details below.
PLAY / STOP	The transport. Stays live throughout Patch Load.
APPLY	Load the highlighted patch. Blank if the highlighted patch is already the active one.
CANCEL	Leave Patch Load without loading.

Loading a patch

Three flavours of load, chosen by what you press:

- **Same-bank APPLY** - press **APPLY** with a patch highlighted in the resident bank.
- UNA swaps to the new patch instantly, preserving playback position. The new patch enters at the same step/bar the old one was on, so the audience hears a clean crossover rather than a restart.
- **Cross-bank APPLY** - press **APPLY** with a patch highlighted in a *different* bank. UNA shows a confirmation screen:
- Cross-bank loads are heavier: the whole 8-patch bank has to move into RAM, and the sequencer has to stop while that happens.
- Press **YES** to commit - UNA stops playback, shows a "Loading Bank B" progress bar as the 8 patches load, then loads the patch you picked.
- Press **NO** to abort without loading anything.

Quick Load shortcut

Hold the CONTROL Knob and quick press a PARAMETER Knob (1–8)

UNA loads that patch instantly, no APPLY needed, and can be use as a performance tool. Try creating some related patches and triggering them while the sequencer is running.

(Note. This gesture works **only within the resident bank**).

Switching banks

Press **BANK** to engage bank-select.

BANK lights up and now the CONTROL Knob picks banks instead of patches.

1. **Rotate CONTROL** to step through banks A → B → C → D. The grid updates to show each bank's contents.
2. To **commit** to the new bank, press APPLY with a patch selected in the new bank. If it's a cross-bank load, UNA shows the confirmation above.
3. To **stay in the new bank as a browse target** without loading yet, press BANK again to disengage bank-select. EDIT is disabled here since the browsed bank isn't resident; APPLY works as expected.
4. To **abort** and revert to the resident bank, press CANCEL while in bank-select - the highlight jumps back to your resident bank.

Patch Edit - rename, reset, copy

From Patch Load, press **EDIT**.



Patch Edit is the hub for changing an individual patch's data - its name, its state, or its slot.

Function	What it does
RENAME	Open the 12-character name editor.
RESET	Reset the patch to factory defaults.
GENERATE	<i>Reserved - future feature.</i>
COPY	Copy this patch to another slot within the current bank.
BACK	Return to Patch Load.

Resetting a patch

Press **RESET**. UNA shows a confirmation prompt.

- Press **YES** to commit.
- UNA resets every parameter on this patch back to factory defaults. The patch's *name* is kept.
- If the patch you're resetting is the one currently loaded and playing, UNA rebuilds the live runtime so you hear the reset instantly. If it's a different slot, the reset writes to disk and takes effect the next time that slot is loaded.
- Press **NO** to back out without resetting.

Copying a patch

Press **COPY** in Patch Edit.

- **Rotate CONTROL** to pick the target slot in the current bank. As you scroll, the header updates to show the target's tag and name.
- Press **APPLY**. UNA shows an overwrite confirmation:
- Press **YES** to commit. (Takes a moment).
- Press **NO** to back out.

After copying: the source patch is unchanged, the target slot now holds a duplicate.

If you copied over the currently-loaded patch, UNA reloads it live so you hear the new content.

Copy is **within-bank only** - you can only pick a target among the 8 slots of the resident bank.

To move a patch across banks, use Midicake CONNECT (see the Backup section below) to export it and re-import it into the target bank.

Renaming a patch

From Patch Edit, press **RENAME** to open the 12-character name editor.



Moving the cursor and changing letters

- **CONTROL Knob rotate** - move the cursor left or right between the 12 character positions.
- **CONTROL Knob press-and-rotate** - change the letter at the current cursor position. Rotate up the alphabet (or down) within the active character set.

The controls

Function	What it does
ABC / abc / 123 / *#!	Cycles the active character set. Quick press to toggle (see below)
SPACE	Replaces the current character with a space.
DELETE	Removes the current character
SUGGEST	Replaces the name with a randomly generated one. Press again for another.
APPLY	Commits the new name and returns to Patch Edit.
CANCEL	Discards the name change and returns to Patch Edit.

The character sets

Set	Characters
ABC	A–Z
abc	a–z
123	0–9
*#!	' ! ? . , : ; + - * = () [] < > # @ { }

Patch Name Suggest

Stuck for a name? Press **SUGGEST** and UNA invents one for you.

Each press replaces the name entirely with a fresh, randomly generated name. Keep pressing until something sticks.

Patch Name Reset

If you press SAVE with the entire name blank (all spaces), UNA reverts to the default name for the slot. e.g. **"Patch A1"**

Patch chains - sequencing your patches

A **patch chain** is the patch-level parallel of the chord chain. Where a chord chain steps through a progression of *chords* over time, a patch chain steps through a progression of *patches* - automatically switching the resident patch as each link's duration elapses.

Build one and UNA can choreograph a whole set on its own: verse patch for two bars, chorus patch for two bars, bridge patch for four, looping round.

A chain is a list of **links**. Each link holds two things:

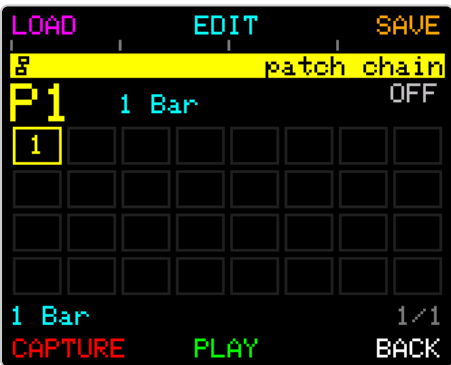
- the **patch number**: 1-8, from the current bank
- the **duration**: how long to hold it before moving on (from a quarter-bar up to many bars).

A patch chain belongs to the bank, not to a patch. So each **bank** has one patch chain, and it can only point at that bank's own 8 patches. Switch banks and you get that bank's chain.

Because a chain only references patches within one bank, the same in-bank crossover applies, so the switches are seamless.

Building a chain

From the **Patches** mode, press **CHAIN**.



The grid shows the chain links, labelled with the patch number.

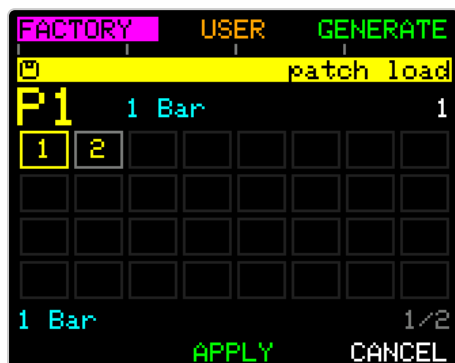
The selected link's patch and duration, and enabled state are show above, the total chain length and shows the selected position are shown below.

LOAD	EDIT	SAVE
CAPTURE	PLAY/STOP	BACK

- **Rotate the CONTROL Knob** to select a chain link.
- **Quick press the CONTROL Knob** to switch the chain on and off
- When it's on and you press PLAY, UNA starts advancing through the links. While the sequencer is running the selection follows playback , so you can see the chain move.

Loading a chain

Press **LOAD** to drop in a starting chain.



Function	What it does
FACTORY	Browse the built-in arrangements.
USER	Your own eight saved chains (see SAVE, below).
GENERATE	Rolls a random chain. Every rotate of the CONTROL Knob rolls a fresh one.
APPLY	Keep the previewed chain and return to Patch Chain Mode.
CANCEL	Returns without applying the new chain.

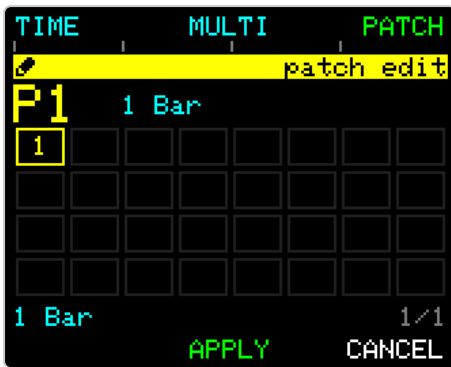
With **FACTORY** or **USER** armed, rotate the CONTROL Knob to browse the eight slots - the number shows in the header.

Everything previews live: if the sequencer's running you'll hear the arrangement immediately.

LOAD turns the chain on. Previewing engages the chain, so a chain that was OFF when you entered Chain Load will be ON when you APPLY.

Editing a chain

Press **EDIT** to shape the chain link by link.



If you've used Chord Chain Edit (Chapter 8), this will all feel familiar.

With nothing armed, **rotate the CONTROL Knob** to move the selection.

Function	What it does
TIME	Change the selected link's duration.
MULTI	Select a <i>range</i> of links instead of a single one - a "block" selection.
PATCH	Change which patch (1-8) the selected link points at.
APPLY	Return to Patch Chain Mode. Edits save live as you make them.
CANCEL	Return and discard all changes.

To change the link's duration, quick press **TIME**, then rotate the CONTROL Knob. (Alternatively, hold TIME and rotate CONTROL).

Hold **MULTI** and rotate CONTROL to extend the block outward from the selected link. (Or, quick press MULTI to latch it on/off). With MULTI select active, a **TIME** or **PATCH** change affects every link in the selection block.

To change the link's target patch, quick press **PATCH**, then rotate the CONTROL Knob. (Alternatively, hold PATCH and rotate CONTROL).

Durations run from a single tick up to 256 bars. New links default to **1 bar**.

The chain holds still while you edit. Entering Edit holds the chain on the active link.

Patch Chain Length

A patch chain can be anywhere from **1 to 32 links**.

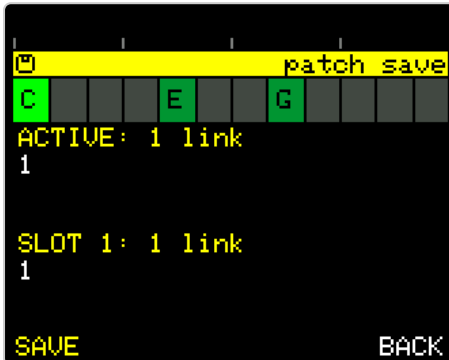
To add or remove links in the chain, **press and hold the CONTROL Knob and rotate**.

The button strip will add or remove the visible links and set the chain length accordingly.

- Added links will default to patch 1.
- Removed links will remain, so if you increase the length your existing data is still there.

Saving a Chain

Press **SAVE** to store the current chain to one of **8 slots**.



The screen shows two summaries:

- **ACTIVE** - the chain you're about to save
- **SLOT** - the target save slot.

The summary shows the chain's link count and the first few patches.

Rotate the CONTROL Knob to pick the target slot.

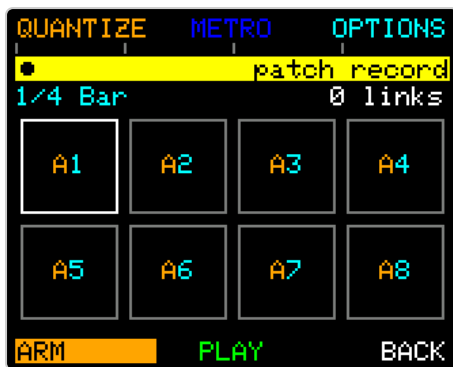
Press **SAVE**, then **YES** to commit, or **CANCEL** to back out.

Saved chains reappear under the **USER** source in Chain Load mode.

Saved Patch-chains are device-wide. Unlike saved chord chains, which pool per bank, the 8 patch-chain slots are shared across every bank - so a chain you like is available everywhere. It'll still only point at the *resident* bank's 8 patches, though, so loading a chain built for Bank A into Bank C gives you Bank C's patches in Bank A's arrangement.

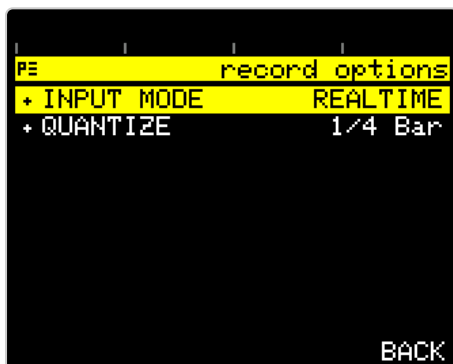
Capturing a chain

Press **CAPTURE** for Patch Chain Record.



Patch Chain capture works almost identically to Chord Chain Capture (Chapter 8).

Here the **parameter knobs (1-8)** are your input - pressing knob *n* chooses patch *n*, the way you'd play chords into a chord-chain capture.



Two ways to record (set under OPTIONS):

- **Step Record** - press patches one at a time; each press adds a link.
- Press the same patch again and it extends the current link rather than adding a duplicate.
- **Realtime** - arm, then play patch changes against the running sequencer.
- UNA quantises each change to the grid. Optionally start with a one-bar metronome count-in.

When you finish, the captured chain becomes the bank's active chain, engaged and ready to play.

Turning it off by hand

If a chain is running and you **load a patch manually**, the chain switches **off**. So a manual load always wins; re-engage the chain with a CONTROL-knob quick press in Patch Chain Mode when you want it driving again.

Patch chains and chord chains happily run at the same time - the patch chain swaps patches while each patch's own chord chain does its thing.

In Performance, when both are active you'll see two thin strips stacked at the top: the patch-chain strip above, the chord-chain strip below, each with a marker creeping across the current link.

How Patch and Chord Chains interact can be controlled with the **Patch Chain Keep Chords** setting in the MENU (see Chapter 17).

Backup and restore - Midicake CONNECT

For backing up patches, sharing them with another UNA owner, or pulling a curated library from a sound designer, use **Midicake CONNECT** - a web app at connect.midicake.com (<https://connect.midicake.com>).

Plug UNA into your computer with a USB-C cable, open the page, and CONNECT can read out your patches, write new ones in, and export individual patches or whole banks as files.

Backing up before a firmware update is recommended - see Chapter 18.

CONNECT itself has its own documentation; this manual just points you at it.

The "save before you experiment" recipe. You like the patch you're on but want to try a wild Modulate setting. Hold CONTROL Knob and rotate → Patch Load. Press EDIT → COPY. Rotate CONTROL to a fresh slot. APPLY → YES. Wait for the copy progress bar. BACK to Patch Load, then load the copy: APPLY. Experiment freely, the original is safe.

The "name it before you forget" recipe. From Patch Load, highlight the patch you just built. EDIT → RENAME. Use the CONTROL Knob and the ABC / abc / 123 / *#! character-set selector to type "VerseA1" or whatever. SAVE.

The "set-list bank" recipe. Pick a bank in Patch Load, BANK, CONTROL rotate to Bank C say, disengage bank-select by pressing BANK again. Now within Bank C, EDIT each slot and RENAME to your song names in playing order (C1 = Opener, C2 = Song Two...). On stage, you only have to remember which bank you're in and the slot numbers; you can use CONTROL + PARAMETER Knob n for the fastest possible song jumps within the bank.

The "choreograph the arrangement" recipe. Build your song's sections into slots of one bank - for example: B1 = intro, B2 = verse, B3 = chorus, B4 = bridge. From Patches, press CHAIN → CAPTURE, arm in Step Record, and quick press the parameter knobs in arrangement order (e.g. 1, 2, 3, 2, 4, 3...), giving each the length you want with the TIME control. END the capture, quick press the CONTROL knob to engage, and press PLAY. UNA now plays the whole arrangement, switching patches with each link. Grab a patch by hand at any point to break out; quick press CONTROL again to hand control back to the chain.

The "back it up monthly" recipe. Plug UNA into your computer. Open connect.midicake.com (<https://connect.midicake.com>). Click Backup. Save the file to wherever you keep your projects. Do this before any firmware update.

Chapter 15 - MIDI

MIDI is how UNA talks to everything else - the keyboard you play into it, the synths it drives, the DAW that syncs to it, the outboard effects it modulates. This chapter is the reference for that plumbing: the physical connectors, the routing settings, and the patterns for common rig scenarios.

Chapter 17 documents the individual Global settings; this chapter shows you how they impact UNA's MIDI behaviour. If you're wondering "why isn't my synth playing," this chapter's Common Rigs section is likely where you'll find the answer.

The physical layer

UNA has three MIDI inputs and four MIDI outputs. Two of the ports - USB-C and USB Host Type-A - are bi-directional, so they show up in both lists.

Inputs

- **USB-C** - connects UNA to a computer. UNA appears as a class-compliant USB MIDI device. Any DAW or MIDI software will see it without drivers.
- **USB Host Type-A** - the rectangular USB-A jack on the rear. Plug a USB MIDI controller into this port (a keyboard, a pad controller, an expression pedal with USB) and its notes reach UNA directly, no computer required.
- **MIDI In (TRS Type-A)** - a 3.5 mm TRS jack. For 5-pin DIN gear, use the TRS → DIN cable included. For gear that already uses TRS Type-A, plug in a straight TRS cable.

All three input paths are active at once. UNA merges them into a single stream and applies the Input Channel filter to what comes in.

A word about the USB Host port and power. UNA supplies bus power to whatever you plug into the USB Host jack. A compact controller is fine. A large, hungry, or bus-powered device - anything with lots of LEDs, screens or motorised faders - can draw more than UNA can comfortably give, and the symptom is UNA browning out, resetting, or the controller failing to start up. If a controller misbehaves on the Host port, power it from its own supply (or a powered USB hub) and it will behave. See Chapter 19 if you're chasing an issue.

Outputs

- **MIDI Out A (TRS Type-A)** - 3.5 mm TRS jack for outgoing MIDI. Cable supplied for DIN.
- **MIDI Out B (TRS Type-A)** - a second independent output.
- **USB-C** - the same USB-C port that acts as an input also sends UNA's output back to the computer.

- **USB Host Type-A** - the same USB Host port that accepts controller input also sends MIDI out to whatever is plugged in. Useful for controllers that expect return traffic - LED feedback, screen updates, motorised faders driven from UNA.

TRS Outputs A and B are independently routable - the same track can go out of both, or you can split Melody to A and Bass to B, or send only one track to each. Configured in the Menu (Chapter 17); explained below.

A note about TRS Type-A

MIDI over 3.5 mm jacks has two competing wiring standards, **Type-A** and **Type-B**. They differ only in which way round the two MIDI signal wires sit on the ring and tip.

UNA uses **Type-A**, the wiring the MIDI Association adopted as the official standard. Two TRS → DIN cables are included for connecting 5-pin DIN gear.

If your gear uses **Type-B** (some manufacturers standardised on it before the spec settled) a plain TRS cable will not work between it and UNA. You need a Type-A-to-Type-B crossover cable. If you're unsure which your device uses, its manual will say.

Input

UNA's input side is governed by four Global settings, all in Menu > MIDI (Chapter 17).

MIDI Input Channel

Which channel UNA listens to for note-on/note-off messages, to set the global chord or capture input, from your external keyboard.

Value	Meaning
OFF	Ignore all MIDI input. UNA doesn't accept keyboard input.
1-16	Accept notes only on the selected channel.
OMNI	Accept notes on any channel.

Setting to a specific channel is the safest choice, to prevent UNA from building chords from multiple connected input devices.

CC Input Channel

The channel gate for UNA's **remote-control CC map**. See below for the full map: *Controller CCs - the hidden remote surface*.

This setting does **not** cover:

- **Any MIDI CC acting as a Modulator's source.** Each Modulator carries its own channel and CC number, set via LEARN or the Assign screen (Chapter 12).
- **The sustain pedal (CC 64).** Enabled globally via the Sustain Pedal setting and read on the same channel as your notes.

Value	Meaning
OFF	No remote-control CCs are consumed. Default - opt in only when you want a controller driving panel actions.
1-16	Accept remote-control CCs only on the selected channel.
OMNI	Accept remote-control CCs on any channel.

CC Input Toggle

Tells UNA what *kind* of button your controller sends on the remote-control CCs, so a press does exactly one thing.

Every remote action is **edge-detected** - it fires only when a CC *crosses* the on/off threshold (value 64), so a repeated value or a swept knob/fader fires once instead of dozens of times.

There are two standard button styles, and they need opposite handling:

Value	Meaning
MOMENTARY	Default. The button sends 127 when pressed and 0 when released (like a piano key or drum pad). Toggles flip once per press; the release is ignored.
LATCHING	The button sends 127 on the first press and 0 on the next (it stays down until pressed again - many footswitches and DAW "toggle" buttons). Toggles follow the button's position, so UNA stays in sync with it.

Under LATCHING the toggle follows the button's position: **down (127) switches the action on, up (0) switches it off**, so UNA stays in step with a latched controller and its indicator light. A high value always means the addressed target is *active* - **Solo Melody** down solos Melody, and the **Mute** CCs act as track on/off switches (down leaves the track playing, up mutes it), matching Solo so that high always means the track is heard.

- If a toggle only reacts to *every other* press, switch to **LATCHING**.
- If a toggle only stays active while you hold the button, switch to **MOMENTARY**.
- One-shot actions (Panic, patch/bank step, tempo nudge) fire once per press in either style.
- Modulator MIDI CC sources always track the knob's value directly (0-127).

MIDI Input Thru

Determines if the notes you play into UNA also pass straight through to the outputs, so your synth hears them as you play.

There are three modes:

Value	Meaning
OFF	UNA captures your playing silently. Your synth hears only UNA's sequenced output.
When Listen Off	UNA passes your notes through only when Listen is off - so you hear yourself soloing over UNA, but the chords you set or capture don't pass through while you're setting them.
Always On	UNA always echoes your playing. Simplest wiring for a single-cable rig where UNA is the only path to your synth.

The **When Listen Off** option is the "**smart mode**" for playing along with UNA. You can play the keys and hear yourself as a soloist over the underlying sequence.

Output

Output routing is a **two-tier** system:

1. Master Port Routing - decides which physical ports can emit
2. TRS Port Track Assignment - decides which tracks go through each enabled TRS port.

Combined, you have granular control over which track goes where.

Enabling and Disabling MIDI Ports

MIDI Output Port Routing (Menu > MIDI item 4) is the top-level switch.

It gates which physical outputs are live.

Value	Ports enabled
All	TRS A, TRS B, USB-C, USB Host (default)
TRS + USB	TRS A, TRS B, USB-C
TRS + HOST	TRS A, TRS B, USB Host
HOST + USB	USB-C, USB Host
TRS ONLY	TRS A, TRS B
USB ONLY	USB-C
HOST ONLY	USB Host

The USB Host output routes MIDI back to a controller - useful if the controller has a display or LEDs that requires feedback from UNA. Not needed for most rigs.

Set to All if you're not sure.

TRS Port Track Assignment

Each TRS output has its own routing setting, to determine which tracks (Melody, Chord, Bass) emit through that port.

TRS OUT A Routing and **TRS OUT B Routing** (Menu > MIDI items 5 and 6) share the same seven-option list:

Value	Tracks routed
ALL	Melody + Chord + Bass (default)
Chord & Melody	(no Bass)
Chord & Bass	(no Melody)
Melody & Bass	(no Chord)
Chord only	
Melody only	
Bass only	

This is where a "split rig" pattern comes together - set OUT A to "Chord & Melody" going to your poly synth, and OUT B to "Bass only" going to your bass synth. Each synth gets exactly what it should play.

It's useful to split outputs where you don't wish to daisy chain MIDI cables. It can also help reduce MIDI message latency; although this is rarely a concern.

Per-track MIDI channels

Each track has its own MIDI output channel, set as a track parameter (Chapters 8, 9, 11). The Channel parameter accepts values 1–16.

By default the channels are stored per patch. **Menu > CONFIG > Track Channels** (Chapter 17) can make them device-wide instead - one shared set of three channels used by every patch, handy for a fixed studio routing.

For a note to reach a synth, three things need to align:

1. The master port enable (previous section) has to include the physical port.
2. That port's per-port routing has to include the track.
3. The synth has to be listening on the track's channel.

If any one of those is misaligned, you'll get silence. The Common Rigs section below shows a couple of worked examples.

Keyboard Split

Keyboard Split (Menu > MIDI item 7) divides your controller into two zones. One zone drives UNA's chord input (the notes UNA uses to capture or select chords); the other zone stays free for solo playing over the top.



How the value encodes the split

Value	Behaviour
OFF	All notes go to chord input.
1–85	Lower split. Notes <i>below</i> the split point drive chord input; notes above are free for solo. The value encodes the split point as an offset.
86–170	Upper split. Notes <i>above</i> the split point drive chord input; notes below are free for solo.

The "play a note to set it" shortcut

While Keyboard Split is the currently displayed Menu item, playing a MIDI note snaps the split point to that note. Play the highest note you want the left hand to reach, and UNA sets the split there.

This is much faster than rotating the CONTROL Knob to hunt for the right note number.

Note range

UNA's MIDI input note range is **C0 (12) to B6 (95)** - a wide range that covers most keybeds.

Notes outside that range are clamped to the boundary. If you play higher than B6 on your controller, UNA reads it as B6.

Chord-tracking works across the full range, but chords that voice into notes above B6 will fold their upper notes down. If a chord ends up sounding lower than you expect, check that its natural voicing isn't hitting the ceiling.

UNA outputs notes in the full 0-127 MIDI pitch range. (C-1 to G9)

MIDI Loop Protection

MIDI Loop Protection (Menu > MIDI item 12) controls whether UNA echoes incoming MIDI **TRS IN** port back out on the **TRS OUT** ports.

It applies to the TRS port only - the USB and USB Host ports are always protected and are not affected by this setting.

- **On (default):** MIDI arriving at the TRS input is not re-transmitted from the TRS output. UNA still passes that input through to the *other* ports if thru and routing allow it - it simply won't send it straight back out the same TRS socket. This is the safe choice for any rig where the TRS out could find its way back to the TRS in, which would otherwise build a feedback loop.

- **Off:** MIDI arriving at the TRS input is also re-transmitted from the TRS output, letting UNA act as a straight MIDI thru/merge box on the TRS port - e.g. a keyboard into UNA's TRS IN passed on to a synth on UNA's TRS OUT. Only turn this off when your TRS out goes to a *different* downstream device and never loops back to UNA's input.

The setting gates all thru traffic on the TRS port - notes, CCs, Program Change and clock/transport alike - not just notes.

MIDI Learn

UNA can learn an incoming CC - a mod wheel, aftertouch, a slider - and bind it to a parameter without you knowing the CC number in advance.

Learn belongs to the Modulation system rather than to MIDI setup, so it's documented with the rest of it: see **Chapter 12 - Modulate**, under *Choosing a source* → *MIDI CC*.

The one thing worth knowing here: UNA does **not** respond to CC messages for direct parameter control. A CC reaches a parameter only by way of a Modulator.

Controller CCs - the hidden remote surface

UNA responds to a fixed set of CC numbers on the **CC Input Channel** as **remote controls for the hardware itself**.

This lets you drive UNA's mixer, performance settings, Track, Mod, and Patch controls from a MIDI controller. Useful for pre-programmed automation, a foot controller that toggles Listen while you're playing, or a DAW that switches patches between song sections.

The CC numbers used here sit in the parts of the MIDI CC space that manufacturers rarely touch, so a normal controller's mod wheel, volume, pan or pedals never collide with these actions.

Every action is **edge-detected** - it fires only when the CC crosses the on/off threshold (value 64), so repeats and swept knobs/faders never re-fire.

Whether the release (value < 64) also counts as a press depends on the **CC Input Toggle** setting (see *Input*, above):

- **Momentary** ignores it (one press = one action)
- **Latching** treats it as the button's "off" press so toggles follow the button's position.

CC	Action
85	Patch Prev
86	Patch Next
87	Bank Prev
88	Bank Next
89	Mod Select (value scales to a modulator index)
90	Mod Toggle (arm / disarm the selected modulator)
102	Select Chord Track
103	Select Melody Track
104	Select Bass Track
105	Mute Chord
106	Mute Melody
107	Mute Bass
108	Solo Chord
109	Solo Melody
110	Solo Bass
111	Toggle Listen
112	Toggle Live Play
113	Toggle Metronome
114	Toggle Chord Chain
115	Toggle Patch Chain
116	Cycle MIDI Thru (Off ↔ Always On)
117	Tempo Down (nudge by 1 BPM)
118	Tempo Up (nudge by 1 BPM)

CC	Action
119	<i>(reserved for future use)</i>
123	Panic (All Notes Off + Stop)

What's not on this map, and why.

- Play / Stop / Continue are driven by native MIDI transport messages, not CCs.
- Direct patch select is driven by Program Change.
- Continuous parameter values (pitch, velocity, etc.) are reached via the **CC-as-modulation-source** path.
- Assign a Modulator with a MIDI CC source and point it at the parameter (Chapter 12).

Most users won't use these mapping - but it's there for when you want to control something externally.

SysEx

UNA does not support sysex messaging for any user facing features.

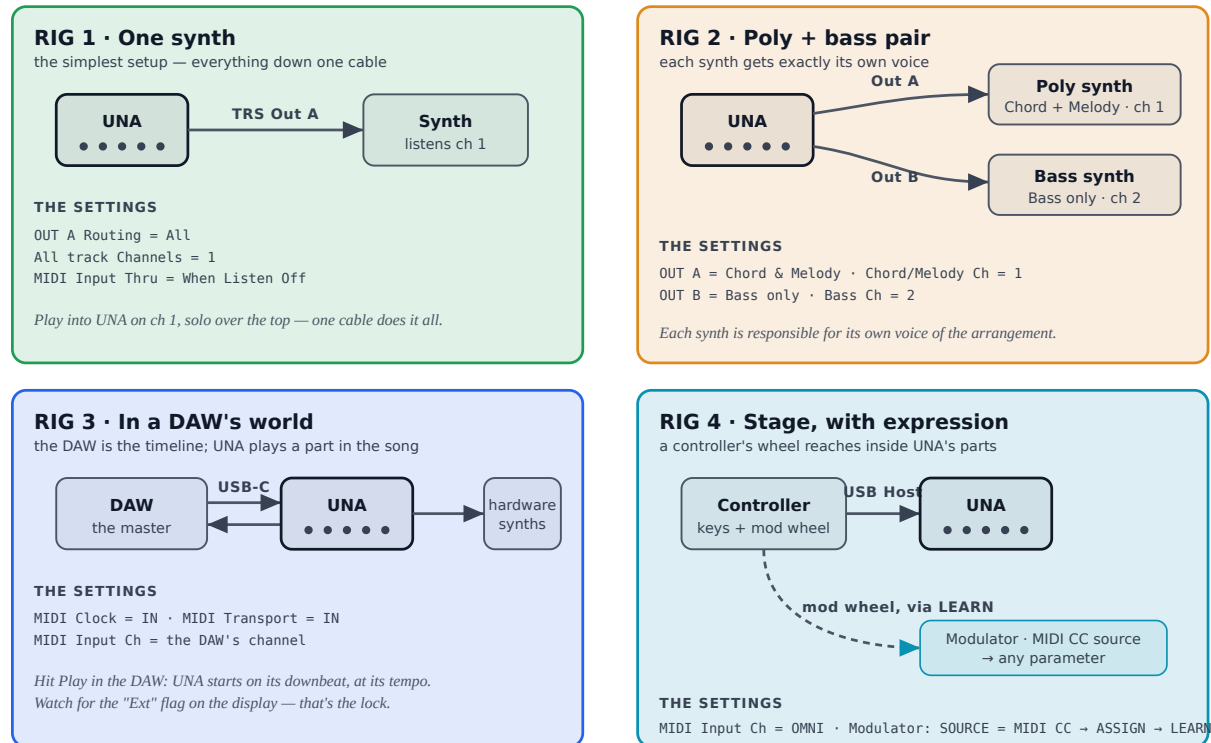
Interaction with Midicake CONNECT is via WebSerial and WebUSB protocols.

Common Rigs

Four worked patterns that cover the vast majority of MIDI setups.

Four rigs cover almost everyone

Find yours, copy the settings, done. If it's silent, re-check these against the three-gates diagram.



Mind the USB Host power note (Ch 15) — hungry controllers want their own supply.

Rig 1 - Solo synth over MIDI Out A

You have one keyboard synth. UNA feeds it. Simplest setup.

- **UNA's MIDI Out A → keyboard's MIDI In.**
- Menu > MIDI > MIDI Output Port Routing = **All**.
- Menu > MIDI > TRS OUT A Routing = **All** (all three tracks reach the synth).
- All three tracks' Channel parameters set to **1** (the synth listens on channel 1).
- Menu > MIDI > MIDI Input Thru = **When Listen Off** (so you can solo over the top).

Play into UNA on channel 1; UNA plays out to the synth on channel 1. Done.

Rig 2 - Split poly/bass synth pair

You have a poly synth and a bass synth. UNA drives both.

- **UNA → MIDI Out A → poly synth.**
- **UNA → MIDI Out B → bass synth.**
- Menu > MIDI > TRS OUT A Routing = **Chord & Melody**.
- Menu > MIDI > TRS OUT B Routing = **Bass only**.

- Melody and Chord track channels set to whatever the poly synth listens on (say, 1).
- Bass track channel set to whatever the bass synth listens on (say, 2).

Now the poly synth gets your chords and melody, and the bass synth gets your bass line. Each responsible for its own voice.

Rig 3 - UNA in a DAW-driven rig

Your DAW is the master. UNA plays a role in the song.

- **DAW → UNA (USB-C).** UNA is a USB MIDI device.
- Menu > MIDI > MIDI Clock = **IN** and MIDI Transport = **IN** (Chapter 17).
- Menu > MIDI > MIDI Input Channel = the channel your DAW sends UNA on.
- UNA's tempo will follow the DAW's clock (Chapter 16).
- UNA's outputs can go to hardware synths via TRS OUT A / B as usual, or back to the DAW via USB-C to be recorded.

Rig 4 - Live rig with a controller

You're on stage. You want a controller you can slide expression into UNA.

- **Controller → UNA (USB Host Type-A).**
- Menu > MIDI > MIDI Input Channel = OMNI (accept anything).
- Configure a Modulator with MIDI CC source (Chapter 12); LEARN your mod wheel to it; point it at whatever parameter you want to sweep. The Modulator captures the channel and CC number during LEARN - no global setting needed.

Now your live playing drives UNA's sequenced parts, and your mod wheel reshapes UNA's output on the fly.

Cross-references

- **Chapter 5** - the Modulate / Listen / Play mental model that underlies most MIDI decisions.
- **Chapter 12** - Modulators, especially MIDI CC as source and MIDI CC as target output.
- **Chapter 14** - Midicake Connect for patch backup and firmware updates.
- **Chapter 16** - Sync & Clock in depth.
- **Chapter 17** - every MIDI Global setting, item by item.
- **Chapter 21** - MIDI Implementation Chart (standard reference table).

Chapter 16 - Sync & Clock

MIDI Clock & Transport

UNA can run as a standalone instrument, follow another device, or *be* the timing reference for everything else in your rig.

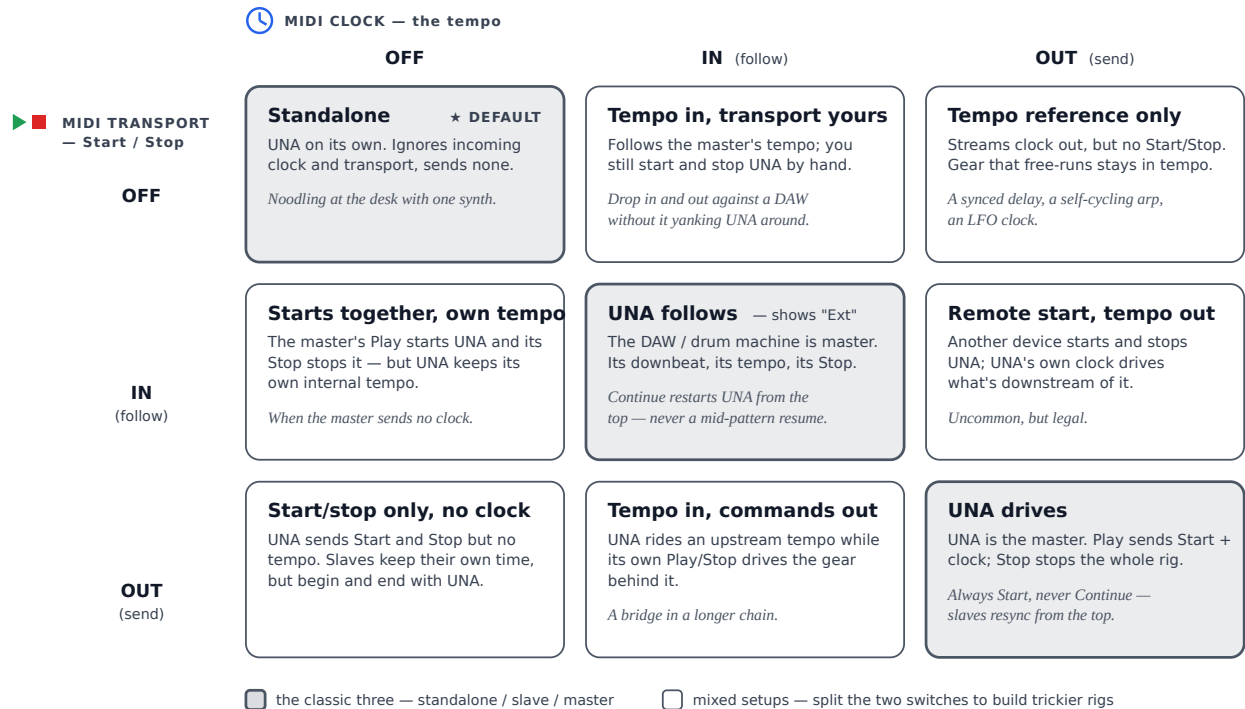
Two independent configuration settings decide this:

- **MIDI Clock** is the steady 24-pulses-per-quarter-note timing signal - the thing that keeps tempo locked between devices.
- Set it to **IN** to slave UNA's tempo to an incoming clock
- **OUT** to broadcast UNA's tempo to other gear
- **OFF** to keep tempo to yourself.
- **MIDI Transport** is the Start / Stop / Continue commands that begin and end playback.
- Set it to **IN** to let another device start and stop UNA
- **OUT** to start and stop other gear from UNA's own Play/Stop
- **OFF** to keep transport local.

Because they're independent, you get a grid of behaviours rather than three. The three *matched* combinations (both OFF, both IN, both OUT) are the classic standalone / slave / master setups most people want, and they're described first; the mixed combinations underneath them unlock the trickier rigs.

Clock × Transport — two switches, nine rigs

Clock is the tempo (24 pulses per quarter note). Transport is Start / Stop. They're set independently — Menu > MIDI.



Both OFF - UNA on its own

The default. UNA's Play and Stop controls drive UNA, and nothing else. Incoming clock and transport messages from other gear are ignored, and UNA emits none of its own. Use this when you're plugged into a synth for sound only, when you're noodling at the desk, or when you don't want UNA tangled up with a DAW's timeline.

Both IN - UNA follows

Set **MIDI Clock = IN** and **MIDI Transport = IN** when something else is the master - a DAW, a drum machine, a groovebox, a modular system. UNA will:

- Start playing when it receives a **Start** or **Continue** message (Transport IN).
- Stop when it receives **Stop** (Transport IN).
- Tick its sequencer in time with incoming MIDI clock, so your tempo display tracks whatever the master is sending (Clock IN).

A small **Ext** indicator appears on the display while UNA is locked to an external clock.

Continue behaves exactly like Start. UNA has no resume-from-position state, so an incoming **Continue** restarts its sequencer from the top, just as a **Start** would. If your DAW is parked at bar 33 and you hit its play button, the DAW resumes from bar 33 while UNA begins again from the top of its own pattern. That's usually what you want from a looping instrument, but it's worth knowing before a take. (UNA still *forwards* the message downstream unchanged - a Continue it receives is passed on as a Continue.)

UNA listens to the first clock source that speaks up - USB host, USB device, or TRS MIDI In - and ignores the others until that source goes quiet. So if your DAW and a hardware sequencer are both connected, whichever sends clock first wins. If you want to switch masters, stop the current one cleanly first.

Example: Your DAW is the timeline. Hit Play in the DAW, and UNA's sequencer starts on the same downbeat at the same tempo. Hit Stop in the DAW, and UNA stops with it. You don't touch UNA's transport controls at all.

Both OUT - UNA drives

Set **MIDI Clock = OUT** and **MIDI Transport = OUT** to make UNA the master. Now:

- Pressing **Play** sends a **Start** message out to your other gear (Transport OUT).
- Pressing **Stop** sends **Stop** (Transport OUT).
- While UNA is running, a steady stream of **MIDI clock** ticks (24 per quarter note, the standard) goes out alongside the notes (Clock OUT).

Wire UNA's MIDI Out into a drum machine, set the drum machine to external sync, and pressing Play on UNA will fire both at once and keep them locked.

A note on resume: UNA always emits **Start** when it transitions into playing - never **Continue**. If you stop and then start again, connected gear will treat that as a fresh start (resync from the top) rather than picking up where it left off. That's deliberate; UNA's transport doesn't have a "pause and resume" state internally, so it doesn't claim one externally either. It's the mirror image of how UNA treats an incoming Continue (above): no resume in either direction.

Mixed combinations - the off-diagonal setups

Splitting clock from transport lets you express rigs a single setting couldn't:

- **Clock IN + Transport OFF - lock tempo, start locally.** UNA takes its tempo from the master's clock, but you start and stop it by hand; incoming Start/Stop are ignored. Handy when you want your part perfectly in tempo with a DAW but under your own transport control - drop in and out without the DAW yanking UNA's playhead.
- **Transport IN + Clock OFF - follow Start/Stop, keep your own tempo.** The master's Play starts UNA and its Stop stops it, but UNA runs on its own internal tempo rather than chasing the master's clock. Good when two instruments should start together but UNA's tempo is the one that counts (or the master doesn't send clock at all).

- **Clock OUT + Transport OFF - drive free-running gear.** UNA streams clock out but sends no Start/Stop - for gear that only wants a tempo reference and free-runs otherwise (an LFO clock, a self-cycling arp, a tempo-synced delay).
- **Transport OUT + Clock OFF - start/stop only, no clock.** UNA sends Start and Stop but no clock, so a slave that keeps its own crystal starts and stops with UNA while running at its own rate.

Transport messages are only acted on when **MIDI Transport = IN**. With Transport OFF or OUT, an incoming Start, Continue or Stop is ignored by UNA's own transport (though it may still be passed through - see Thru, Chapter 15).

Live Play and the transport OUT sub-setting

UNA has a feature called **Live Play**: when the sequencer is stopped, holding a note on your keyboard runs the sequencer for as long as you hold the key. Release the key and the sequencer stops. It's a way to play arpeggios, chord patterns, and basslines as gestures rather than as a Play/Stop performance.

Holding Live Play with a sustain pedal. Live Play normally lasts only as long as your fingers are down. Plug a sustain pedal into your keyboard and UNA treats **CC64** as a latch: hold the pedal and the sequencer keeps running even after you lift your hands, so you can move between chords without it stopping in the gaps - the same "hold" gesture a pianist gets from a damper pedal. Release the pedal and playback stops, *unless* you're still holding keys, in which case Live Play just carries on from them. Playing a new chord while the pedal is down changes UNA's harmony live, exactly as if you'd pressed Play. This is governed by the **Live Play Sustain (CC64)** Global (Chapter 17), which is **ON** by default; set it OFF to make Live Play always stop the instant you release the keys.

Foot-Play from a stopped state. The sustain pedal also works as a hands-free Play: press it with **no keys held while the sequencer is stopped** and UNA starts Live Play on the current (or last) sync chord, exactly as if you'd held a note down. Release the pedal to stop. Combined with the latching behaviour above, the pedal becomes a full foot-controlled Live Play - press to start, hold while you play the keys, release to stop. Requires the CONFIG menu **Live Play** setting (Chapter 17) to be ON, same as the held-key path.

When **MIDI Transport** is **OUT** (and/or **MIDI Clock** is **OUT**), Live Play raises a question: should holding a key broadcast transport and clock to the rest of your rig, the same way pressing Play does? Sometimes yes (you want the drum machine to lock in while you noodle a riff). Sometimes no (Live Play is for private experimentation; you don't want every key-hold restarting the drum machine).

The **MIDI Out / Live Play** setting (in the MIDI menu) decides:

- **ON** (the default): Live Play behaves like Play. Holding a key sends **Start**, streams clock while you hold, sends **Stop** when you release. Connected gear follows along.
- **OFF**: Live Play stays silent on the MIDI bus. Connected gear sits still until you press Play properly. If you're already holding keys and *then* press Play, that's when **Start** goes out.

Both settings live in **Configuration → MIDI**, right next to each other.

A note on daisy-chaining

If you ever have UNA in **IN** mode reading transport from one device and you've routed UNA's output back to that same device (a loop), UNA does the safe thing and does *not* re-broadcast a Stop in response to an incoming Stop. You won't get a transport echo storm. (Most users won't hit this - it matters if you're building a multi-device sync mesh.)

Timing internals - the short version

Two facts worth knowing about UNA's timing engine when it's syncing to other gear.

Internal resolution. UNA runs at **384 ticks per bar** internally - a high-resolution grid that makes swing, microtiming, and per-step Delay values feel natural rather than snapped. For MIDI clock output, UNA emits the standard **24 PPQN** (24 pulses per quarter note). Both stay perfectly aligned with each other. Chapter 13 covers timing internals in full.

If external clock disappears. In IN mode, UNA doesn't run a watchdog for clock loss - if the master stops sending clock mid-play without also sending Stop, UNA continues at its last-received tempo until a Stop arrives or you press Stop manually. Not usually a problem in practice, but worth knowing if your DAW crashes mid-song. Chapter 13's "If external clock disappears" section has the full detail.

Sync in practice

Three worked patterns cover the common multi-device sync scenarios.

Pattern 1 - UNA drives a drum machine

You want UNA to be the timing master and everything else to follow.

- **UNA MIDI Out A → drum machine's MIDI In.**
- Menu > MIDI > MIDI Clock = **OUT** and MIDI Transport = **OUT**.
- Drum machine set to external sync (whatever the manufacturer calls it).
- Press **Play** on UNA. Both start together; both stay locked. Press **Stop** on UNA. Both stop together.

If you also use Live Play (holding a keyboard note to run UNA), decide whether the drum machine should also lock in when you're holding: Menu > MIDI > MIDI Out On Live Play - **ON** (drum follows Live Play too) or **OFF** (drum ignores Live Play and only follows the transport control).

Pattern 2 - UNA follows a DAW

Your DAW's timeline is the source of truth.

- **DAW → UNA (USB-C).**

- Menu > MIDI > MIDI Clock = **IN** and MIDI Transport = **IN**.
- Enable MIDI clock output from your DAW (each DAW's setting has a different name - Ableton calls it "MIDI Clock," Logic "MIDI Sync," etc.).
- Hit Play in the DAW. UNA's sequencer starts on the DAW's downbeat at the DAW's tempo. Stop in the DAW. UNA stops with it.

The **Ext** indicator on the Performance display confirms UNA is locked. If Ext doesn't appear, the DAW isn't sending clock - check the DAW's MIDI output settings.

Pattern 3 - UNA in the middle of a chain

UNA follows one device *and* drives another - a common studio pattern where UNA sits between a master (say, a DAW) and a slave (say, a drum machine or modular clock).

- **DAW → UNA (USB-C)**. UNA follows the DAW.
- **UNA MIDI Out A → drum machine**. UNA drives the drum machine.
- Menu > MIDI > MIDI Clock = **IN** and MIDI Transport = **IN** (UNA is a slave to the DAW).
- Enable clock **broadcast** through UNA - this happens automatically when Clock and Transport are IN with an active clock source; UNA relays clock and transport to its own outputs.

Hit Play in the DAW. All three devices start together on the same downbeat. UNA takes the DAW's tempo, then hands it downstream. The drum machine has no idea the DAW exists - it just sees clock arrive from UNA.

The daisy-chaining safety noted above (UNA doesn't re-broadcast Stop back to its input source) matters here - if you happen to route the drum machine back into your DAW's MIDI network, UNA won't create a Stop-echo loop.

Pattern 4 - UNA drives a modular via MIDI-to-CV

For synchronising a modular system to UNA, you need a MIDI-to-CV converter with a clock output. A good compact option is the **FLAME uQMCV** - a small MIDI-to-CV interface with clock, note, and gate outputs.

- **UNA MIDI Out A (TRS Type-A) → uQMCV MIDI In**. Use a TRS-to-TRS cable if the uQMCV takes TRS Type-A directly, or the TRS-to-DIN cable from UNA's box if it uses a 5-pin DIN MIDI input.
- **uQMCV clock output → modular clock input**. The uQMCV converts UNA's MIDI clock stream into a per-quarter-note gate pulse (or a division of it, depending on how you configure the uQMCV).
- Menu > MIDI > MIDI Clock = **OUT** (Transport = **OUT** too if you want Play/Stop to gate the modular; leave Transport **OFF** to free-run and drive the modular from clock alone).
- Set the uQMCV's clock output to your preferred subdivision - 24 PPQN raw is uncommon on modular; more likely you'll want the uQMCV to divide down to a 1/16 or 1/8 note clock that a Maths, Metropolis, or Pamela's will accept.

Press Play on UNA. The modular's clock input receives the pulse; whatever's downstream (envelopes, sequencers, LFOs) locks in.

The uQMCV can also convert UNA's per-track MIDI channels to independent CV/gate pairs - meaning UNA can send *note information* to the modular too, not just clock. Set the Bass Track's channel to whatever the uQMCV is listening on, wire that CV/gate pair to a modular voice, and now UNA's bass line is playing an actual oscillator in the modular. Combined with the sync above, you've got a modular voice that plays UNA's basslines locked to UNA's timing.

Pattern 5 - Two UNAs synced together

Two UNAs give you a lot more Modulator slots, a lot more patch memory, and the ability to keep two independent parts running that share a common transport. Common workflow: one UNA does chords and bass, the other does melody with a totally different Modulate setup - they play together as a single instrument with double the parameter surface.

- **UNA #1 (the master) MIDI Out A → UNA #2 (the slave) MIDI In.**
- UNA #1: Menu > MIDI > MIDI Clock = **OUT** and MIDI Transport = **OUT**.
- UNA #2: Menu > MIDI > MIDI Clock = **IN** and MIDI Transport = **IN**.
- Each UNA drives its own synths from its own MIDI outputs.

Press Play on UNA #1. Both start together at UNA #1's tempo. Change tempo on UNA #1 (press-and-rotate Knob 1) and UNA #2 follows.

If you want the two UNAs to play *different tracks together* - for example, UNA #1 handles Chord + Melody and UNA #2 handles Bass - mute the redundant tracks on each unit's Mixer. Track mute state is a Global (Chapter 17), so once you've set it, it stays set across patch changes on that unit. You end up with a "distributed" instrument: chord/melody on one screen, bass on the other, both locked.

For live performance, keep UNA #1 as the "conductor" (the one whose Play/Stop control is authoritative). UNA #2 follows silently until UNA #1 starts.

Pattern 6 - Switching masters mid-set

Sometimes you want UNA to follow a DAW during a song, then take over as the standalone master during a break, then follow again. Switching the Clock and Transport settings mid-set is possible but not instant - the gesture chain is: **Mixer → MENU → MIDI → CONTROL Knob rotate to the Clock item (or Transport, the item after it) → press-and-rotate CONTROL Knob to change value → BACK, BACK**. A handful of presses per setting, which is fine at a break but not fine during a song.

Two tactics for smooth transitions:

Tactic A - cued switch. Before the break, stop the master (the DAW) cleanly. UNA's transport also stops. Do the Menu switch to change MIDI Transport (and Clock) from IN to OFF while things are stopped. Press Play on UNA. UNA is now the standalone master. When the master comes back later, stop UNA, switch Transport and Clock back to IN, and wait for the master's next Start.

Tactic B - lock tempo, keep local transport. The split offers a cleaner version of this: set **MIDI Clock = IN** but **MIDI Transport = OFF**. UNA stays locked to the master's tempo, but its own Play/Stop is always yours - you drop in and out by hand without the master starting or stopping UNA, and without any menu diving mid-song. (If you instead want to swap *which* upstream device is the clock source, leave Clock = IN and switch which device is sending clock: UNA follows whichever source starts first - see the first-source-wins note earlier in this chapter - but make sure only one source sends clock at a time.)

Tactic A is more explicit and safer; Tactic B is faster but requires disciplined clock management upstream. Neither is perfect. For anything that requires split-second timing, don't switch masters mid-song - plan the transition into a natural break.

Cross-references

- **Chapter 13** - timing internals (384 ticks per bar, 24 PPQN output, external clock loss behaviour).
- **Chapter 15** - MIDI I/O - the physical ports and routing settings that the sync setup rides on.
- **Chapter 17** - the MIDI Clock, MIDI Transport, and MIDI Out On Live Play Globals, item by item.

Chapter 17 - Settings (Globals)

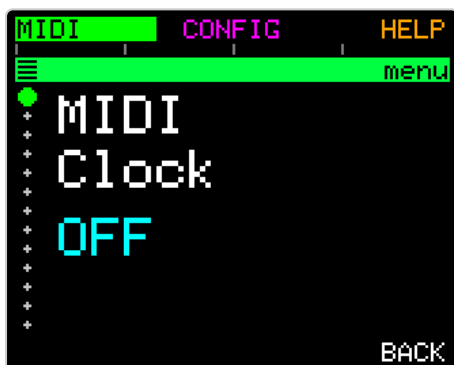
A **Global** is a device-wide setting that belongs to UNA as a whole, rather than to the patch you're currently on.

MIDI routing, keyboard split, the click-on-live-play preference - all of these are things you set once for your particular rig, and they persist across every patch you load.

This chapter documents the settings that live in the Menu, plus the BIOS Mode, where reset and diagnostic actions live. If you're new to UNA, most of the defaults will already suit you.

Getting to the Menu

From Performance Mode, press the CONTROL Knob to enter the Mixer, then press **MENU**.



Inside the Menu there are the following button assignments:

Function	What it opens
MIDI	MIDI settings.
CONFIG	Playback and behaviour settings.
HELP	UNA's on-device Tutorial Mode (see Chapter 3).
BACK	Return to the Mixer.

Select a category, then:

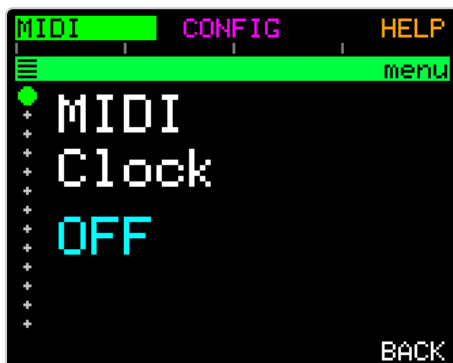
- **Rotate the CONTROL Knob** to step through the settings.
- **Press-and-rotate the CONTROL Knob** to change the value of the selected setting.

Every edit saves immediately.

The music keeps playing throughout; you can adjust settings mid-performance without stopping.

The MIDI menu

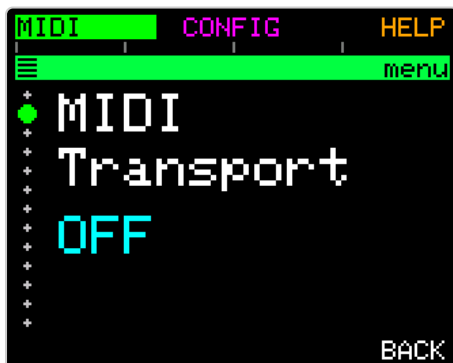
1. MIDI Clock



Controls how UNA handles MIDI **clock** - the steady 24-pulses-per-quarter-note timing signal that keeps tempo locked between devices:

- **OFF** - UNA ignores incoming clock and sends none of its own. It keeps its own internal tempo.
- **IN** - UNA slaves its tempo to incoming clock. A DAW or drum machine sets the pace; UNA's local tempo edits are ignored while clock is arriving.
- **OUT** - UNA streams clock out alongside its notes, so other gear can lock to UNA's tempo.

2. MIDI Transport



Controls how UNA handles MIDI **transport** - the Start, Stop and Continue commands that begin and end playback:

- **OFF** - UNA ignores incoming Start/Stop/Continue and sends none of its own. You start and stop UNA locally.
- **IN** - UNA follows incoming transport. A DAW's Play starts UNA; its Stop stops UNA.
- **OUT** - pressing Play on UNA sends Start; stopping sends Stop, so connected gear starts and stops with UNA.

Clock and Transport are independent, which unlocks the useful mixed setups: **Clock IN + Transport OFF** locks UNA's tempo to the master while you start and stop it by hand; **Transport IN + Clock OFF** follows the master's Start/Stop but runs UNA on its own tempo; **Clock OUT + Transport OFF** drives free-running gear that only needs a tempo reference. Chapter 16 has the full sync behaviour reference, including working scenarios for all possible combinations.

3. MIDI Input Channel



Which MIDI channel UNA listens to on its inputs. Range: **OFF**, **1-16**, **OMNI**.

- **OFF** - ignore MIDI input entirely.
- **1-16** - accept only messages on the selected channel.
- **OMNI** - accept messages on any channel.

Most keyboards default to channel 1, so unless you're deliberately splitting channels, OMNI is the friendliest choice.

4. MIDI Input Thru



How MIDI notes you play into UNA are echoed to the outputs while you play:

- **OFF** - UNA captures your notes silently. Useful if your keyboard is already going straight to your synth via another path.
- **When Listen Off** - UNA echoes your playing only when the Listen toggle is off (so you hear yourself soloing, but chord captures don't leak through).
- **Always On** - UNA always echoes your playing. Simplest wiring for a single-cable rig.

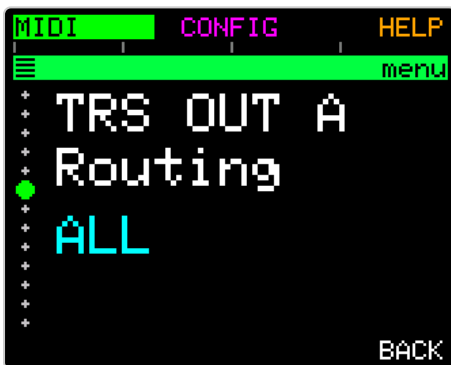
5. MIDI Output - Port Routing



The master enable mask for UNA's outputs.

Turns individual output ports on and off at the top level, above the per-port routing that follows. See Chapter 15 for details.

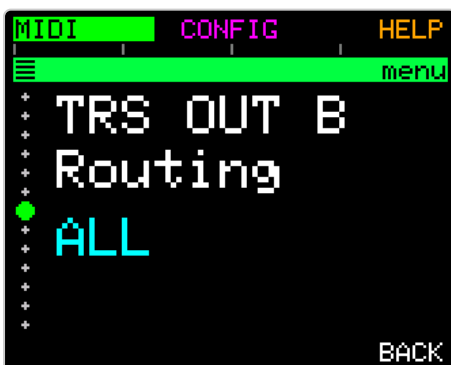
6. TRS OUT A Routing



The tracks that go out of MIDI Out A.

Each track (Melody, Chord, Bass) can be independently enabled on this port. Combined with the per-track MIDI channels, this lets you route different tracks to different synths.

7. TRS OUT B Routing



Same as OUT A, but for MIDI Out B.

A common pattern: OUT A gets Melody and Chord for a poly synth; OUT B gets Bass alone to a mono bass synth.

8. Keyboard Split



Splits the keyboard into two zones - one drives chords, the other drives melody/solo. Selection options are split between:

- OFF
- Down from split point for chord input
- Up from split point for chord input

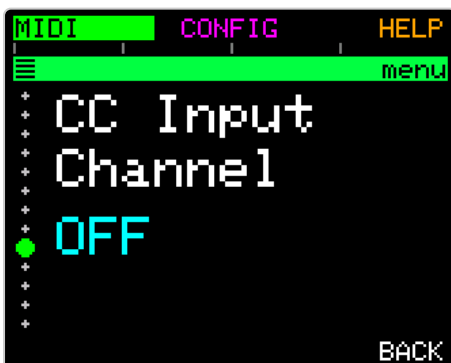
Chapter 15 has the full split behaviour reference.

Handy shortcut:

While Keyboard Split selected, play a note on your keyboard. UNA snaps the split point to that note.

Much faster than rotating the CONTROL Knob to hunt for the right value.

9. CC Input Channel



Sets the Input MIDI Channel for UNA's **remote-control CC map** - (The hardcoded CC numbers that let a MIDI controller trigger panel actions).

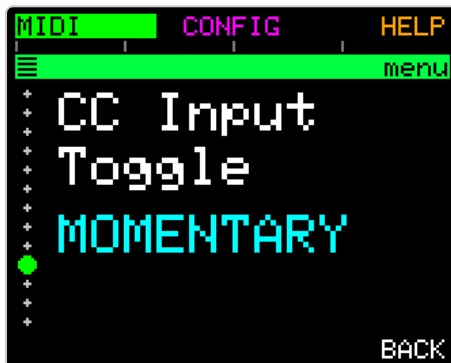
- **OFF** (default) - external CCs are ignored

- **1-16** - exact match
- **OMNI** - accept on any channel

Full map in Chapter 15.

This is **not** the general MIDI CC filter. Modulators with a MIDI CC source each carry their own channel (set via LEARN or the Assign screen in Chapter 12), and the sustain pedal is gated by its own Sustain Pedal setting.

10. CC Input Toggle



Tells UNA whether your external controller sends:

- **Momentary** buttons (127 on press, 0 on release - piano keys, drum pads)
- **Latching** buttons (127, then 0 on the next press - many footswitches and DAW toggle buttons).

This setting decides how the input is handled.

- **MOMENTARY** (default) - toggles flip on press and release.
- **LATCHING** - toggles flip on every other press.

If a toggle only reacts to *every other* press, switch to LATCHING; if it only holds while you press, switch to MOMENTARY.

Full detail in Chapter 15 - *Input and Controller CCs*.

Every remote action is edge-detected, so a swept knob or fader will work with either setting.

11. MIDI Out On Live Play



Governs whether Live Play (holding a key with the sequencer stopped) also broadcasts Start / Stop / Clock to your other gear.

- **ON** (default) - Live Play behaves like a real Play: connected gear locks in as you hold notes.
- **OFF** - Live Play stays private. Connected gear sits still until you press Play properly.

Set to ON when you want a drum machine to run whenever your fingers are on the keys; OFF when Live Play is for private practice or arrangement noodling.

IMPORTANT NOTE:

MIDI Clock and MIDI Transport, must be set to OUT for this to function.

AND Live Play must be enabled.

12. MIDI Loop Protection



A safeguard against MIDI feedback loops on the **TRS** port.

- When **on** (default), MIDI coming in on TRS is not echoed back out the TRS output, so a TRS cable that loops back to UNA can't build a feedback loop.
- When **off**, TRS input is passed straight to the TRS output, letting UNA work as a MIDI thru box on that port.

It gates all thru traffic on TRS - notes, CCs, Program Change and clock - not just notes.

USB and USB Host are always protected and are unaffected by this setting.

13. Live Play Sustain (CC64)



Lets a **sustain pedal** latch Live Play, similar to how a piano's sustain pedal holds notes after you lift your hands.

When UNA is running from held keys (Live Play - Chapter 16), press and hold a sustain pedal (MIDI **CC64**) and UNA keeps running even after you release the keys. So you can move between chords without the sequencer stopping in the gaps.

Release the pedal and playback stops, *unless* you're still holding keys, in which case Live Play simply carries on.

- **ON** (default) - a CC64 sustain pedal latches Live Play as described.
- **OFF** - CC64 is ignored; Live Play stops the moment you release the keys.

Playing a new chord while the pedal is held updates UNA's harmony live, exactly as if you'd pressed Play. The pedal is read on the same channel as your notes (the MIDI Input Channel, item 3 above).

The CONFIG menu

1. Velocity Sensitivity



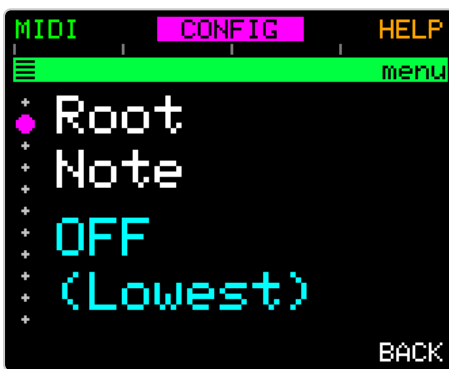
ON / OFF (default OFF).

- When on, the velocity you play is carried into UNA's output, so playing softly makes UNA play softly.
- When off, incoming velocity is ignored and each track uses its own velocity setting instead.

When ON, the import velocity modulates the track velocity, it doesn't override it; so your velocity stepper patterns and Mixer settings are maintained.

Turn it on if you want your touch to come through; leave it off if your keybed feels twitchy.

2. Root Note



Controls how UNA decides which note is the **root** of the chord you're holding - the root UNA names the chord from, and the note the tracks anchor to.

- **OFF (Lowest)** (default) - the root is the lowest note you play. Predictable, and how UNA has always worked.
- **Chord** - UNA reads the whole chord and finds its musical root, so inversions resolve: play C-E-G in any order and the root is C. Hold C minor with G at the bottom and the root is C, not G.
- **Key of C ... Key of B** - as **Chord**, and additionally uses the key you pick to interpret chords that have no third in them (sus and stacked-fourth voicings), which are genuinely ambiguous. In Key of C, holding G-C-D reads as Csus2 rather than Gsus4.

This never overrides a chord that has a clear root of its own - an A minor 7 stays A minor 7 - and chords from outside the key you pick are left alone. UNA also never invents a note you aren't holding: with a rootless voicing (say just the 3rd and 7th of a jazz chord), the lowest note stays the root.

Which tracks actually follow the detected root is up to **Root Note Tracks**, below.

Whenever detection is on, the Performance **Info** views (Chapter 6) show a small **G>C** read-out - the note you played lowest, then the root UNA detected - so you can see what UNA is making of what you're playing. With Root Note **OFF** the two are always the same note, so the read-out is hidden.

3. Root Note Tracks



Chooses which tracks follow **Root Note** detection. Tracks included in the selection use the detected root; the others stay on the lowest note you actually play.

The options mirror the MIDI OUT routing choices: **ALL** (default), **Chord & Melody**, **Chord & Bass**, **Melody & Bass**, **Chord**, **Melody**, **Bass**.

A common setup is **Bass**: the Bass track follows the harmonic root of your chord while the Melody and Chord tracks stay anchored to the voicing you played. Holding C minor with G at the bottom, the Bass plays C while the Chord track still voices G-C-Eb as you fingered it.

This setting has no effect while Root Note is set to **OFF (Lowest)** - with detection off, both roots are the same note.

Chord chains behave exactly like live playing: a chain remembers the notes you recorded, and Root Note detection is applied as each chord plays. Changing either Root Note setting therefore changes how an existing chain is interpreted from the next chord onward - no re-recording needed.

4. Accents Amount



How much louder an accented step plays than a normal step.

Applies to any step marked as an Accent (Chapter 9).

The value is a velocity boost, adjustable from **+10 to +50** (default **+20**), with a final **MAX** setting that pushes accented steps to full velocity (127).

4. Time Sort Order



The order in which the Time parameter values are presented.

- **By Speed** (default): orders the values by how fast a pattern sounds, interspersing straight, dotted and Triplet notes.
 - [1, 2D, 2, 4D, 2T, 4, 8D, 4T, 8, 16D, 8T, 16, 32D, 16T, 32]
- **By Type**: groups the values into two sets, Triplets and Dotted on the left, Straight on the right.
 - [16T, 32D, 8T, 16D, 4T, 8D, 2T, 4D, 2D, 1, 2, 4, 8, 16, 32]
- This allows quick doubling of halving of track playback speed.

5. Solo Output Channel



Where your solo-mode playing (Listen off, fingers on keys) is routed on the MIDI outputs.

- **Match Input** - echoes on the same channel you're playing on.
- **1-16** - forces the solo output to a fixed channel, regardless of what the input channel is.
- Useful when your solo-voice synth expects a specific channel.

6. Solo Pitch Quantize



Auto-corrects your solo notes to fit the current harmony. Six modes:

- **OFF** - pass your notes through unchanged.
- **CHORD** - snap to the current chord tones only.
- **PENTA** - snap to the pentatonic scale of the current key.
- **SCALE** - snap to the full diatonic scale of the current key.
- **BLUES** - snap to the minor blues scale of the root, blended with chord tones. Great for expressive solos.
- **CHROMATIC** - pass all 12 notes through (no snapping).

This is UNA's "no wrong notes" promise. Set to CHORD or PENTATONIC when you're playing over a progression and want your solo to sit in it automatically.

7. Live Play



Gates whether external MIDI keyboard notes can start and drive the sequencer via **Live Play** (Chapter 5).

- **ON** (default) - holding notes on your keyboard runs the sequencer for as long as you hold them, exactly as described in Chapter 5.
- **OFF** - Live Play is disabled. Incoming keyboard notes still set the shared chord (so the Melody and Bass tracks still follow your playing harmonically), but they no longer start or drive the sequencer. Only manual Play (the PLAY / STOP control) starts the transport.

Turn OFF when you ONLY wish to play over UNA - soloing against a running sequence - without your keyboard also acting as the start/stop trigger.

OFF is useful when you want to set the chord but not hear it play.

Also gates the CC64 sustain-pedal start (item 12 in the MIDI menu): with Live Play OFF, the pedal won't start the sequencer either.

8. Track Mutes



Where a track's mute state is remembered.

- **Global** (default) - mutes are device-wide. Mute the Bass Track and it stays muted as you switch patches. The mute lives outside the patch.
- **Per Patch** - each patch remembers its own mutes, and loading a patch restores them.

Global is the better default for live use: you drop the bass out for a breakdown and it stays out, whichever patch you move to. Choose Per Patch when a patch's mutes are part of its arrangement - a verse patch with no bass, a chorus patch with everything in.

9. Track Channels



Where a track's MIDI output channel is remembered.

- **Global** - the three track channels are device-wide and shared by every patch. Editing CHANNEL changes the shared channel; the channels stored in your patches are left untouched.

- **Per Patch** (default) - each patch stores its own channel for each track (the CHANNEL track parameter, Chapter 7). Loading a patch restores its channels.

Switching to Global copies the current patch's channels into the shared values, so nothing re-channels at the moment you switch. Switching back to Per Patch re-reads each patch's stored channels.

Global suits a fixed studio routing - the synth on each channel never changes, so every patch should address the same three channels no matter what was saved in it. Per Patch suits patches that address different gear.

10. Patch Chain Keep Chords



Governs what happens to the **chord chain** when a patch chain switches patches for you (Chapter 14).

- **ON** (default) - the chord chain that's currently playing keeps running across the patch change.
- The patches change the sounds and the parts; the progression underneath carries on.
- **OFF** - each patch brings its own chord chain with it.
- The progression changes when the patch does.

Leave it ON when a patch chain is choreographing a single song over one progression. Turn it OFF when each patch in the chain is a different song.

HELP

HELP in the Menu opens UNA's on-device Tutorial Mode. Chapter 3 covers the Tutorial in full; the same tutorial that runs on first boot.

What lives elsewhere

Not everything device-wide lives in the Menu. Some settings have their own home:

- **Tempo** - Press and Rotate PARAMETER Knob 1 (in Performance Mode). Persists as a Global.
- **Time signature** - Metronome page, TIME SIG.

- **Metronome enable and volume** - Metronome page, ON/OFF and VOLUME.
 - **Track mute state** - the Mixer (Chapter 6). Saved as Global by default.
 - **Current bank / current patch** - automatically tracked; loaded on boot.
 - **Voice Mode (Poly / Mono)** - set per track in each track's PARAMS menu, not in the Menu.
 - Poly lets a track sound multiple notes at once; Mono forces one note at a time. Saved per patch.
-

BIOS - the hidden hold-CONTROL menu

There's one more layer beyond the Menu: **BIOS Mode**, which holds UNA's system-level actions - reset, factory reset, MIDI activity log, and a memory dump.

Getting in

Hold the CONTROL Knob for 3 seconds from any mode, with no other input. UNA enters BIOS Mode.

You can also **boot straight into BIOS** by holding the CONTROL Knob while powering on. Useful if there is ever an issue, and you want to reach the reset.

The BIOS menu



Four items, selected by rotating the CONTROL Knob and pressed via **ENTER**.

EXIT returns to your previous mode.

Item	What it does
MIDI LOG	Live monitor of MIDI events flowing through UNA. Useful when diagnosing routing problems.
MEMORY DUMP	Read-only view of every Global's current stored value. For advanced troubleshooting; not very interesting.
SOFT RESET	Restores all Global settings to factory defaults. Patches are preserved.
FACTORY RESET	Restores Globals <i>and</i> erases all patches. Everything back to as-shipped.

Both reset actions ask for confirmation before running - **YES** commits, **NO** backs out.

Which reset do I want?

- **SOFT RESET** - use when a MIDI routing or a Menu setting has got out of hand and you want the defaults back without losing your work. Patches survive.
- **FACTORY RESET** - when you want to start over from scratch. Everything is erased.

Back up your patches to Midicake CONNECT first (Chapter 14) if you want to keep them.

The MIDI Log

MIDI LOG shows recent MIDI events in a table - index, command, channel, data byte 1, data byte 2. Colour tells you direction (incoming vs. outgoing). Rotate the CONTROL Knob to page through history when there's more than a screenful.

Most useful when you're wondering "is my keyboard even talking to UNA?" or "is UNA sending what I think it's sending?" - the answer will show up as a live scrolling log.

About defaults

Every Global has a default value. If in doubt, **SOFT RESET** in BIOS restores those defaults without touching your patches.

Cross-references

- **Chapter 6** - Menu access from Performance.
- **Chapter 13** - Metronome & Timing, including Tempo, Time Signature, and click settings.
- **Chapter 15** - MIDI, for the deep dive on routing, channels, and CC behaviour.

- **Chapter 16** - Sync & Clock, for the full MIDI Clock and MIDI Transport behaviour.
- **Chapter 14** - Patches & Banks, for what's *not* Global (patch state).

Maintenance

Chapter 18 - Firmware Updates

Firmware updates give UNA new features and bug fixes. Midicake ships them periodically.

This chapter walks the update process end to end.

The short version: **back up your patches first (using CONNECT), then use Teensy Loader to flash the new firmware, then load your patches back.** Everything else in this chapter is detail on top of that flow.

Checking your current firmware version

UNA's version is displayed on the BIOS screen. To reach it:

1. From any mode, hold the CONTROL Knob for 3 seconds (Chapter 17). UNA drops into **BIOS**.
 2. The version line reads `v.MAJOR.MINOR.BUILD` - for example, `v.0.18.1517`.
-

Before you update - back up your patches

Always back up before updating. Updates are designed to preserve your patches, but better safe than sorry.

Backup is via **Midicake CONNECT** at connect.midicake.com (<https://connect.midicake.com>). The workflow:

1. Connect UNA to your computer with a USB-C cable.
2. Open connect.midicake.com (<https://connect.midicake.com>) in a Chrome or Edge browser (WebSerial-supported browsers).
3. Connect grants a device connection prompt - approve it.
4. Click **Backup**. Connect reads your patches and Globals out and saves them as a file on your computer.

Store the backup file somewhere safe. If you ever want a "roll back to this exact state," this is your restore point.

Chapter 14 has more on Connect for patch management generally.

Will my patches survive the update?

Yes. **Firmware updates do not erase your patches.** Installing new firmware leaves your patches, banks and Globals exactly as they were. You shouldn't lose work because you installed an update.

The only things that deliberately erase patches are the ones you choose: **FACTORY RESET** in BIOS, or holding the reset button while UNA boots (Chapter 17).

Back up before every update anyway. Not because we expect to lose your patches, but because a backup costs thirty seconds and a Connect export lives happily on your computer forever. Chapter 14 covers backup and restore.

Updating with Teensy Loader

UNA runs on Teensy, and firmware updates use the standard **Teensy Loader** application - a free download from PJRC, the Teensy manufacturer, at [pjrc.com/teensy/loader.html](https://www.pjrc.com/teensy/loader.html) (<https://www.pjrc.com/teensy/loader.html>). Install the current version; you don't need a specific one.

<!-- TODO: -- > **Updating from inside Connect is coming.** A future release will let Midicake Connect flash firmware over USB, so you won't need Teensy Loader at all. Until then, the steps below are the way.

Step 1 - Get the firmware file

Download the current firmware `.hex` file from the midicake.com/downloads (<https://midicake.com/downloads>) page.

Step 2 - Install Teensy Loader

Install the Teensy Loader application from PJRC's website. It's a small, standalone program available for Windows, macOS, and Linux. No drivers needed.

- Windows: https://www.pjrc.com/teensy/loader_win10.html
- Mac: https://www.pjrc.com/teensy/loader_mac.html
- Linum: https://www.pjrc.com/teensy/loader_linux.html

Step 3 - Put UNA into Program mode

- Connect UNA to your computer with USB-C.
- On the rear panel of UNA, press the **Firmware Update button** (the small recessed control near the USB-C port).
- UNA's display goes blank and the unit stops responding to controls. That's expected - it's waiting for a new firmware image.

Step 4 - Load and upload the firmware

- Open Teensy Loader.
- Open the `.hex` file you downloaded - use the "Open Hex File" option, or drag the file into the app window.

- Teensy Loader detects UNA and shows "UNA connected" (or similar).
- Click **Program** in Teensy Loader (or press the Firmware Update button on UNA's rear panel again - Teensy Loader treats both as the trigger).
- Progress bar fills. Takes about 10 seconds.

When the flash completes, UNA reboots automatically and your patches load as before.

Step 5 - Restore patches (only if you need to)

Your patches should be exactly as you left them. If something has gone wrong and you want to put your backup back:

1. Reconnect UNA to your computer.
2. Open connect.midicake.com (<https://connect.midicake.com>).
3. Click **Restore** and select the backup file you made in step 1.
4. Connect writes the patches back.

If the update fails

Firmware updates are pretty robust - the Teensy platform is designed to survive a bad flash. If something goes wrong (power interrupt, wrong `.hex` file, disconnect mid-update), UNA won't be permanently broken. Options:

- **The unit reboots into partial firmware.** Just re-run the update - press the Firmware Update button and flash again.
- **The unit won't boot at all.** Hold the Firmware Update button while connecting USB-C. UNA enters Program mode directly, without needing to boot the existing firmware. Then flash normally.
- **Teensy Loader doesn't see UNA.** Try a different USB-C cable (some are power-only). Try a different USB port on your computer. Try restarting Teensy Loader.

If none of those work, contact Midicake support (midicake.com/contact-us (<https://midicake.com/contact-us>)) - where we can help can guide recovery.

Cross-references

- **Chapter 14** - Patches & Banks (Midicake Connect for backup / restore).
- **Chapter 17** - BIOS Mode (where the version is displayed).
- **Chapter 19** - Troubleshooting, if the update leaves UNA misbehaving.

Chapter 19 - Troubleshooting

Most UNA problems are fixable in under two minutes if you know where to look.

This chapter is organised by **symptom** - pick the one that matches what you're seeing, and the entries below walk through the most likely causes and their fixes in order of probability.

Two gestures worth knowing before you dive in:

- **Panic** - if notes are hanging on a synth, **hold PLAY / STOP for about half a second** (in Performance Mode).
- UNA stops and sends all-notes-off / all-sound-off on every MIDI channel. Use this any time something has clearly gone sideways - a hold always forces a full stop.
- **Soft Reset** - if UNA's *settings* have got tangled but your patches are fine, hold the CONTROL Knob for 3 seconds to reach BIOS, then **SOFT RESET** (Chapter 17).
- Restores all Globals to defaults; patches survive.

Support: for anything not resolved here, midicake.com/contact-us (<https://midicake.com/contact-us>).

No sound

The most common issue. Work through these in order:

- 1. Is UNA playing?** Check the display. In Performance Mode, the position bar should be animating and the note pool should be lit. If nothing's animating, press **Play**.
- 2. Are your tracks muted?** Enter the Mixer (press the CONTROL Knob from Performance). Check each track's LED. If any of Chord / Melody / Bass is dark, that track is muted. Press it to un-mute.
- 3. Is the master port enabled?** Menu > MIDI > MIDI Output Port Routing. If it's set to a value that excludes the port your synth is on, no MIDI reaches the synth. Set to **All** to eliminate this as a cause (Chapter 15).
- 4. Is that port routed to a track that's playing?** Menu > MIDI > TRS OUT A Routing (or OUT B). If it's set to "Bass only" and only your Melody track has notes, nothing gets sent. Set to **All** to eliminate as a cause.
- 5. Are the track and synth on the same MIDI channel?** Each track has a Channel parameter (Chapter 15). Your synth listens on a specific channel - usually configurable. If Melody is on UNA's channel 1 and the synth is listening on channel 2, they miss each other.
- 6. Is the synth's volume up?** Obvious, but worth checking. Also check the synth isn't in headphone mode with an unplugged headphone jack (a common cause).

7. Is the cable right? UNA's MIDI Outs use **TRS Type-A**. If your synth uses 5-pin DIN, use the TRS → DIN cable supplied. If your synth uses TRS Type-A, a normal TRS-to-TRS cable is fine. If your synth uses TRS Type-B, you need a Type-A-to-Type-B crossover cable - a plain TRS cable will not work.

MIDI in not received

You're playing your keyboard, but UNA isn't reacting.

1. Which physical input? UNA has three: **USB-C** (from a computer), **USB Host Type-A** (from a USB controller), **MIDI In TRS** (from 5-pin DIN or TRS gear). Confirm which port your keyboard is connected to and check the cable at both ends.

2. Is the Input Channel filtering out your notes? Menu > MIDI > MIDI Input Channel. If it's set to a specific channel (say, 1) and your keyboard is transmitting on a different channel, UNA won't accept your notes. Set to **OMNI** to eliminate as a cause (Chapter 15).

3. Is Listen the wrong way round? In Performance Mode, check the LISTEN LED. With Listen off, UNA still receives your notes for solo playing, but chord *capture* requires Listen on. If you're expecting UNA to detect a chord change from your playing, turn Listen on.

4. Right cable, right way round. UNA's TRS jacks are Type-A. The supplied TRS-to-DIN cables have a **TRS Type-A plug on one end** (goes into UNA) and a **5-pin DIN plug on the other** (goes into your DIN gear). MIDI is unidirectional per cable, so check the signal flow: UNA MIDI Out → cable → your synth's MIDI In; or your controller's MIDI Out → cable → UNA MIDI In. If your gear uses TRS Type-B, a straight cable won't work - see the *TRS Type-A* note in Chapter 15 for the crossover options.

5. Is your keyboard actually transmitting? Some keyboards can be muted at their local MIDI settings. Try playing a note and check whether your keyboard has an "activity" LED that flashes on note-on.

Notes hanging on a synth

A note started playing and won't stop.

Panic. Double-press Stop in Performance Mode. UNA sends all-notes-off on every channel. Fastest fix. If the hung notes are on the synth's side (a synth voice stuck in its own envelope), Panic clears UNA's contribution but may not clear the synth - check the synth's own transport or turn it off/on if Panic doesn't do it.

Prevent recurrence. Hanging notes usually mean UNA sent a note-on but the corresponding note-off got lost - cable disconnected mid-note, MIDI loop, buffer overflow at the synth. Common causes:

- **MIDI Loop Protection disabled.** Turn it on: Menu > MIDI > MIDI Loop Protection (Chapter 15). Prevents feedback in DAW-echoing rigs.
 - **Cable disconnected mid-play.** Check TRS cables are firmly seated. TRS jacks are less mechanically forgiving than DIN.
 - **Synth overwhelmed.** If UNA is sending many-note polyphony to a monophonic-only synth, some notes can jam. Check the synth's voice count.
-

Tempo drift

UNA feels like it's not quite in time with your other gear.

- 1. Are you actually synced?** If UNA is in OFF mode (Chapter 16) and your DAW is running its own timeline, they'll drift because they're running independent clocks - no shared timing reference. Set UNA to **IN** (following the DAW) or **OUT** (driving the DAW) so they share a clock.
 - 2. Is the DAW sending clock?** Some DAWs don't send MIDI clock by default. In Ableton: Preferences → Link/MIDI → set "Sync" on the output. In Logic: Project Settings → Synchronization → MIDI → Transmit Clock. Confirm from UNA by looking at the **Ext** indicator on the Performance display when MIDI Clock is IN - if Ext doesn't appear, no clock is arriving.
 - 3. Is UNA the master when it shouldn't be?** If MIDI Clock is OUT and your DAW is set to receive external clock, the DAW is following UNA and any tempo change on UNA transports the DAW. If you meant the DAW to lead, swap the roles (Chapter 16).
-

Encoders feel wrong

A knob is skipping steps, or the CONTROL Knob rotates unevenly.

- 1. Is the parameter locked?** Track parameters can be locked (Chapter 8) - a locked parameter won't change no matter how you rotate. Check whether the parameter icon shows a lock indicator.
 - 2. Is the display showing what you expect?** If you're rotating a PARAMETER Knob and no on-screen change happens, the knob may be on a parameter that has a very narrow range (e.g. 0-2). Try turning further before assuming a fault.
 - 3. Encoder hardware.** UNA's encoders are mechanical parts and can wear over years of hard use. If a specific encoder consistently misfires (skips steps in one direction, or triggers phantom rotations), that's likely a hardware issue - contact support.
-

Display artifacts

The display shows garbage pixels, a stuck screen, or flickering.

1. Power cycle. Unplug UNA from USB-C, wait 5 seconds, plug back in. Solves most transient display glitches.

2. Firmware crash. Though rare, it's possible for UNA's firmware to hit an issue that leaves the display corrupted. If a power cycle doesn't fix it, note what you were doing when the display went bad and report it - Midicake actively fixes these.

3. Hard fault recovery. UNA can crash and reboot on its own if something in the code goes wrong. On the next boot, UNA prints crash information to serial. If you have technical support open, they may ask you to capture this via Connect's diagnostic tool.

Controls not responding

You press a control and nothing happens.

1. Are you in the right mode? UNA's six labeled controls are context-sensitive - one that opens a sub-mode in one context might be disabled in another. Check the labels on-screen; a control with an empty label is deliberately inactive.

2. Are you in the middle of a confirm prompt? Some actions (patch load, patch copy, reset) put UNA into a "confirm" state where only YES and NO respond. Look for a confirmation message and hit **NO** to back out.

3. Physical fault. If a specific control never responds regardless of mode, it's likely a hardware issue. Contact support.

Patches not saving

You made an edit but it didn't persist.

1. Autosave is silent. UNA autosaves without a visible cue. If you're on the patch you edited, everything is saved. Power-cycle UNA and load that patch again to verify.

2. Copy-to-slot mistake. Patch copy replaces the *destination* patch's contents. If you copied a source patch and don't see it, you may have copied it into the wrong destination. Check what's in each slot.

3. Storage layout mismatch. If UNA just came out of a firmware update that changed the storage layout, a factory reset happened automatically at boot - your old patches were wiped. Restore from a Connect backup (Chapters 15, 19).

UNA won't power on

The display is dark and the unit is unresponsive.

- 1. USB-C cable.** Some USB-C cables are power-only and don't pass USB data - UNA needs both. Try a known-good data-capable USB-C cable.
 - 2. Power source.** UNA draws from USB-C. Confirm the source is delivering power. A laptop that's asleep won't power UNA reliably; a computer that's fully off definitely won't. USB hubs sometimes don't deliver enough power - try connecting directly to a wall adapter or a powered hub.
 - 3. Unplug anything on the USB Host port.** UNA supplies power to whatever you connect there. A hungry controller can take enough that UNA won't boot. Disconnect it and try again; if UNA now starts, power the controller from its own supply (Chapter 15).
 - 4. Recovery from a failed firmware update.** If a firmware update was interrupted, UNA can end up in a state where it doesn't boot. Recovery: hold the rear-panel Firmware Update button while connecting USB-C. UNA enters Program mode; flash the current firmware via Teensy Loader (Chapter 18).
 - 5. Hardware fault.** If none of the above work, the unit likely has a hardware issue. Contact support.
-

UNA restarts by itself

The screen freezes for a moment and UNA reboots, as though it had been power-cycled.

- 1. Check the USB Host port first.** This is the most likely cause. UNA powers whatever you plug into the Host jack, and a controller drawing more than UNA can supply will pull the voltage down until UNA resets - often just as you play a busy passage, because that's when the controller lights up. Unplug it. If the resets stop, power the controller from its own supply or a powered hub (Chapter 15).
 - 2. Try a different USB-C supply.** A marginal power source produces the same symptom. A wall adapter is a better test than a laptop port or an unpowered hub.
 - 3. If it keeps happening with nothing on the Host port,** note what you were doing - which mode, which action, whether the sequencer was running - and contact support. UNA records the details of an unexpected restart internally, and support can walk you through retrieving them. A restart you can reproduce on demand is the most useful thing you can bring us.
-

Nothing here matches - using the diagnostic tools

For everything else, UNA's **BIOS Mode** (Chapter 17) has two diagnostic screens that help pinpoint problems:

- **MIDI LOG** - live view of every MIDI event flowing through UNA. If you're wondering "is my keyboard even reaching UNA," open MIDI LOG and play a note. If nothing scrolls, the problem is upstream of UNA. If notes appear, the problem is downstream (routing, channel, synth-side).
- **MEMORY DUMP** - a snapshot of all UNA's Global values. Useful when reporting bugs to support - they may ask you to note specific values.

Hold the CONTROL Knob for 3 seconds from any mode to reach BIOS. Rotate to select the diagnostic you want, press **ENTER**. **EXIT** returns to your previous mode.

Contacting support

For anything unresolved: **midicake.com/contact-us** (<https://midicake.com/contact-us>).

When you write, include:

- **UNA's firmware version** (Chapter 18 - check via BIOS).
- **What you were doing when the problem started.** As specific as possible.
- **What you've already tried.**
- **A Connect diagnostic report** if you can - Midicake CONNECT has a "Send diagnostics" action that captures logs, MIDI activity, and firmware state in one file. Attach it to your message.

Midicake's team is small and responsive. Most tickets get a first response within a day.

Reference

Chapter 20 - Specifications

Processor and memory

| Processor | SparkFun Teensy MicroMod (ARM Cortex-M7, 600 MHz) |
|---------------|---|
| Patch storage | 128 KB EEPROM (two 64 KB chips) |
| Patches | 64 - 8 banks (A-H) of 8 |

Display and controls

| Display | 160 × 128 colour TFT (ST7735) |
|-----------------|---|
| PARAMETER Knobs | 8 endless rotary encoders with push |
| CONTROL Knob | 1 endless rotary encoder with push |
| CONTROL buttons | 6, each with a full-colour LED |
| Audio | Onboard buzzer - metronome click and startup tune |

MIDI

| MIDI In | 3.5 mm TRS Type-A |
|--------------------|--|
| MIDI Out A / Out B | 3.5 mm TRS Type-A, independently routable |
| USB-C | Class-compliant USB MIDI, and power |
| USB Host | Type-A, for class-compliant USB MIDI controllers |
| Clock | MIDI clock in and out at 24 PPQN; transport in and out |

All three inputs are live at once and merged into a single stream (Chapter 15).

Sequencer

| | |
|---------------------|---|
| | |
| Tracks | 3 - Chord, Melody, Bass |
| Internal resolution | 384 ticks per bar |
| Time signatures | 4/4, $\frac{3}{4}$, 2/4, 6/8 |
| Chord chain | Up to 32 links; 8 user chains per bank |
| Patch chain | Up to 32 links; 8 user slots, shared across banks |
| Melody Stepper | 8 lanes, up to 32 steps each |
| Modulators | 8 per patch, plus 16 global |

Firmware

Updated over USB-C using the rear-panel Firmware Update button and Teensy Loader (Chapter 18). Updates preserve your patches.

Physical and power

Dimensions, weight and power requirements to be confirmed.

Chapter 21 - MIDI Implementation Chart

| Function | Transmitted | Recognised | Notes |
|-------------------------------|-------------|------------|--|
| Note On | Yes | Yes | Out: one channel per track. In: sets the chord, drives Live Play and solo. |
| Note Off | Yes | Yes | |
| Control Change | Yes | Yes | Out: from a Modulator targeting a MIDI CC. In: see below. |
| CC 123 (All Notes Off) | Yes | No | Sent on every channel by Panic Stop (Chapter 6). |
| Program Change | No | Yes | Loads a patch in the resident bank. Passed through unchanged. |
| Pitch Bend | No | No | |
| Channel Aftertouch | No | No | |
| Polyphonic Aftertouch | No | No | |
| Clock | Yes | Yes | 24 PPQN, in and out (Chapter 16). |
| Start | Yes | Yes | |
| Continue | No | Yes | Treated as Start - UNA restarts from the top rather than resuming. |
| Stop | Yes | Yes | |
| Active Sensing | No | No | |
| System Exclusive | - | - | Reserved for internal use; not a user-facing feature in v1.0. |

Control Change, in detail

UNA treats incoming CC three ways, and it's worth keeping them apart:

- **CC does not drive parameters directly.** There's no "CC 74 always controls filter cutoff" mapping. A CC reaches a parameter only through a Modulator with MIDI CC as its source (Chapter 12).
- **CC 64 (sustain pedal)** latches Live Play, so it keeps running while you change chord. Only when Live Play is on (Chapter 17).
- **A set of controller CCs** act as a remote surface - transport, track mute and solo, patch and bank navigation, tempo. These are listed in Appendices B and C.

UNA transmits CC only from a Modulator pointed at a MIDI CC target, plus the All Notes Off it sends on a Panic Stop.

Aftertouch and pitch bend

Neither is received or generated in v1.0. If you play a keyboard with aftertouch into UNA, the aftertouch messages are simply ignored - though they will still pass through if MIDI Thru is on (Chapter 15).

Chapter 22 - Appendices

- **A** - Glossary
 - **B** - Global CC Map (64 entries)
 - **C** - Config CC Map (64 entries)
 - **D** - Colour Quick Reference
 - **E** - State & Mode Map (from State Model doc)
 - **F** - Per-Mode Function & Knob reference table (already substantially complete from State Model close-read)
 - **G** - Gesture Cheat Sheet (press, hold, press-and-rotate, hold-and-rotate)
 - **H** - Safety, Warranty, Compliance
-

Appendix F - Per-mode control reference

The six CONTROL buttons are numbered **1–6**, left to right, top row then bottom. A blank cell means the button does nothing in that mode.

PLAY / STOP moves. It normally sits on button 5, but on screens where button 5 is **APPLY**, the transport moves to button 4. The label on screen is always right.

Performance

| 1 | 2 | 3 | 4 | 5 | 6 |
|-------|--------|------|----------|-------------|---------------|
| CHORD | MELODY | BASS | MODULATE | PLAY / STOP | <i>(none)</i> |

- Buttons 1–3: **press** enters that track's mode; **hold** makes it the active track for the PARAMETER Knobs.
- CONTROL Knob: **quick press** → Control space · **rotate** → cycle the display view (Notes → Notes+Info → Notes+Info Extra) · **press-and-rotate** → Patch Load.

Control space (the mixer)

| 1 | 2 | 3 | 4 | 5 | 6 |
|--------|-------|---------|------|---------|------|
| LISTEN | METRO | C CHAIN | MENU | PATCHES | BACK |

- PARAMETER Knobs 1 / 2 / 3 = Chord / Melody / Bass: **press** → mute · **rotate** → velocity · **press-and-rotate** → MIDI channel · **hold CONTROL + press** → solo.
- CONTROL Knob: **quick press** → leave · **rotate** → browse patches.

Metronome

| 1 | 2 | 3 | 4 | 5 | 6 |
|----------|----------|--------|---|---|------|
| TIME SIG | ON / OFF | VOLUME | | | BACK |

Press TIME SIG or VOLUME to arm the setting, then rotate the CONTROL Knob.

Chord Mode

| 1 | 2 | 3 | 4 | 5 | 6 |
|-------|--------|--------|---------|-------------|------|
| CHAIN | RHYTHM | PARAMS | SUGGEST | PLAY / STOP | BACK |

RHYTHM is greyed out in Drone Mode.

Chord Chain Record

| 1 | 2 | 3 | 4 | 5 | 6 |
|----------|-------|---------|----------------------|----------------|------------------|
| QUANTIZE | METRO | OPTIONS | ARM → START →
END | PLAY /
STOP | BACK /
CANCEL |

In Step Record, button 1 reads **TIME** and button 3 becomes **UNDO**. Button 4 shows **WAIT** during a count-in and **DONE** when finished.

Chord Chain Replace

| 1 | 2 | 3 | 4 | 5 | 6 |
|---------|---|--------|----------------|-------------|------|
| SUGGEST | | DELETE | RESET / REVERT | PLAY / STOP | BACK |

BACK commits the chord you're hearing. There is no separate APPLY, and no discard - use RESET / REVERT to compare against the original.

Chord Suggest

| 1 | 2 | 3 | 4 | 5 | 6 |
|--------|--------|---------|-------------|-------|------|
| SELECT | METHOD | OPTIONS | PLAY / STOP | APPLY | BACK |

METHOD toggles Smart ⇌ Degrees. PARAMETER Knobs 1–8 jump to suggestion 1–8.

Melody Mode

| 1 | 2 | 3 | 4 | 5 | 6 |
|----------|---|--------|---------|-------------|------|
| SEQUENCE | | PARAMS | CAPTURE | PLAY / STOP | BACK |

Bass Mode

| 1 | 2 | 3 | 4 | 5 | 6 |
|------|--------|--------|---------|-------------|------|
| LOAD | IMPROV | PARAMS | CAPTURE | PLAY / STOP | BACK |

Stepper - Edit

| 1 | 2 | 3 | 4 | 5 | 6 |
|-------|-------|--------|----------------|-------|--------|
| STEPS | MULTI | ROTATE | RESET / REVERT | APPLY | CANCEL |

- Hold CONTROL and button 2 relabels to **TIE/SLD** (Gate lane) or **ACC/MUTE** (Velocity lane).
- Hold CONTROL and press **RESET** to reset just the selected step, or the MULTI block.
- CONTROL Knob: **rotate** → move the cursor · **press-and-rotate** → change the step's value.

Modulate

| 1 | 2 | 3 | 4 | 5 | 6 |
|------|---|------|---|-------------|------|
| EDIT | | PAGE | | PLAY / STOP | BACK |

PARAMETER Knobs 1–8 are the eight Modulators' Amounts. PAGE cycles patch → global 1 → global 2.

Patch Load

| 1 | 2 | 3 | 4 | 5 | 6 |
|------|-------|-------------|-------------|-------|---------------|
| EDIT | CHAIN | <i>bank</i> | PLAY / STOP | APPLY | BACK / CANCEL |

Button 3 shows the current bank letter. Rotate the CONTROL Knob to select a patch.

Appendix G - Gesture cheat sheet

UNA's controls carry more than one meaning each. There are only six gestures to learn.

| Gesture | What it generally means |
|--|--|
| Press a button | Do the thing named on screen. In Performance, a track button is the exception: the first press selects that track, and a second press opens its mode. |
| Hold a button | A second, related action - e.g. hold PLAY / STOP for a Panic Stop. The track buttons have no hold action; only the press counts. |
| Rotate a knob | Change a value; on the CONTROL Knob, move a selection. |
| Press and rotate a knob | A PARAMETER Knob's <i>secondary</i> parameter (9–16). On the CONTROL Knob, a mode-specific alternate - Patch Load from Performance, or a step's value in Stepper Edit. |
| Hold CONTROL, rotate a PARAMETER Knob | A temporary edit . The value moves while you hold and snaps back when you let go. Shown in yellow . Nothing is saved. |
| Hold a PARAMETER Knob, rotate CONTROL | A staged edit . The value is dialled in, shown in purple , and commits when you release the knob. |

Two more worth knowing:

- **Hold CONTROL and press a PARAMETER Knob** in the Control space to **solo** that track.
- **Hold the CONTROL Knob for three seconds** from any mode to open **BIOS** (Chapter 17).

Tempo is the exception to the temporary-edit rule: it's a device-wide value, not part of a patch, so a change to it always sticks.

Conventions in this manual

A few visual conventions to know:

- **Bold** text marks UNA's user-interface terms - controls, modes, parameters. When you see **Listen**, **Modulate Mode**, or **PARAMETER Knob 3**, those are real things on the unit.
- *Italic* text emphasises a state or an idea ("Listen *on*" vs. "Listen *off*").
- `Monospace` text marks file names, URLs, or things you'd type into a connected app.
- **Track colours** appear in diagrams and callouts - the same colours UNA uses on screen. See the Colour Language section in Chapter 4 for the full reference.

Each chapter in this manual can be read in order, or on its own as a reference. Cross-references look like *(Chapter 12)* or *(Appendix F)* - jump around freely.

Legal & support

Safety and compliance

Important safety instructions

Read all safety instructions before operating this equipment, and keep them for future reference.

- **Power.** UNA is powered via USB-C. Use only a USB-compliant power source rated to supply at least **500 mA at 5 V DC** (standard USB 2.0). Do not use a damaged cable or power adapter.
- **Liquids.** Do not expose UNA to rain, moisture, or any liquid. Do not place liquid-filled containers on or near the unit.
- **Heat.** Do not place UNA near heat sources such as radiators, stoves, amplifiers, or in direct sunlight for prolonged periods. Operating temperature: **0 °C to 40 °C (32 °F to 104 °F)**.
- **Cleaning.** Clean only with a dry cloth. Disconnect all cables before cleaning.
- **Ventilation.** Do not block ventilation openings. Install in accordance with the manufacturer's instructions.
- **No user-serviceable parts.** UNA contains no user-serviceable parts. Do not open the unit. If you have any issues please contact Midicake support.
- **Modifications.** Do not modify UNA. Modifications not expressly approved by Midicake Ltd may void your warranty and any regulatory compliance.
- **Damage.** Discontinue use and contact Midicake support if UNA has been damaged, exposed to liquids, dropped, or does not operate normally.

Hearing warning

UNA does not produce audio itself, but it drives audio equipment that can produce sound at potentially damaging levels. Prolonged exposure to high sound-pressure levels can cause permanent hearing loss.

- Start each session at a low volume and increase gradually.
- Take regular breaks from loud playback.
- Consult a doctor if you experience ringing in your ears, hearing loss, or discomfort.
- Consider using hearing protection when performing or rehearsing at high volumes.

Regulatory compliance

United Kingdom - UKCA. UNA is designed to comply with the applicable UK Statutory Instruments covering electromagnetic compatibility (EMC) and the restriction of hazardous substances (RoHS). The Declaration of Conformity will be made available from midicake.com/contact-us (<https://midicake.com/contact-us>).

European Union - CE. UNA is designed to comply with the applicable EU directives, including the EMC Directive (2014/30/EU) and the RoHS Directive (2011/65/EU as amended). The Declaration of Conformity will be made available from midicake.com/contact-us (<https://midicake.com/contact-us>).

WEEE (EU / UK). The crossed-out wheelie-bin symbol on the packaging indicates that this product must not be disposed of with general household waste at end of life. Take it to a designated collection point for the recycling of electrical and electronic equipment. Correct disposal helps prevent negative consequences for the environment and human health.

Other markets. UNA is manufactured in the United Kingdom. If you are using UNA outside the UK or EU, please check your local regulations regarding the import and use of electronic equipment; compliance with regional requirements outside the UK and EU has not been certified.

Warranty

Limited one-year warranty

Midicake products are thoroughly tested prior to despatch. In the unlikely event of a fault, UNA is covered by a "Back to Base" limited warranty for a period of **one (1) year from the date of purchase**.

What this covers. Manufacturing defects and component failures under normal use.

What this does not cover.

- Damage caused by accident, misuse, abuse, liquid ingress, or unauthorised modification.
- Damage caused by use with incompatible or defective power adapters or cables.
- Cosmetic damage that does not affect functionality.
- Consequential loss.

Making a claim.

1. Contact us via midicake.com/contact-us (<https://midicake.com/contact-us>) with a description of the fault, the unit serial number, any connected devices, and the country in which you are using the product.
2. If the equipment needs to be returned, we will issue you with a **Returns Authorisation Number (RAN)**. Do not send anything before you have one - deliveries may be refused.
3. Ship the product to us well protected. Return shipping to Midicake is at your cost. Use a service that requires signature on delivery, and consider insuring the shipment.
4. On receipt and examination, if a fault is confirmed we will repair or replace the unit at our discretion and cover the cost of return to you. If no fault is found, we will discuss the case with you; return to you is chargeable.

Overseas returns. Mark all packages clearly with the words **TEMPORARY IMPORT** to avoid import duty. If unmarked, any import duty charge is your responsibility.

Statutory rights. This warranty is provided in addition to, and does not affect, your statutory consumer rights.

Full terms: midicake.com/terms (<https://midicake.com/terms>).

Support and contact

- **Website:** midicake.com (<https://midicake.com>)
- **Support:** midicake.com/support (<https://midicake.com/support>)
- **FAQ:** midicake.com/faq (<https://midicake.com/faq>)
- **Downloads and firmware:** midicake.com/downloads (<https://midicake.com/downloads>)
- **Manuals:** midicake.com/manuals (<https://midicake.com/manuals>)
- **Community forum:** midicake.com/forum (<https://midicake.com/forum>)
- **Contact us:** midicake.com/contact-us (<https://midicake.com/contact-us>)

Follow Midicake on YouTube, Instagram, Facebook, X, and TikTok - all links at midicake.com (<https://midicake.com>).

Address.

Midicake Ltd, The Orchard, Ponthir, Newport, NP18 1GG, United Kingdom.
Company No. 13820803 registered in England & Wales.

Copyright and trademarks

© 2026 Midicake Ltd. All rights reserved.

This manual is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Midicake Ltd. Midicake Ltd assumes no responsibility for any errors or inaccuracies that may appear in this document.

No part of this manual may be reproduced, transmitted, stored in a retrieval system, or translated into any language in any form or by any means without the prior written permission of Midicake Ltd, except for the reader's personal use.

Trademarks. Midicake and UNA are trademarks of Midicake Ltd. MIDI is a trademark of the MIDI Manufacturers Association. USB is a trademark of USB Implementers Forum, Inc. All other trademarks are the property of their respective owners.