TUCCILLATOR

USER GUIDE 1.0.0

A six-voice synthesizer with a direct, hands-on layout. Start with a preset, then shape the source, brightness, note envelope and space. The arpeggiator can turn held notes into moving patterns.



Compact view / example settings.

YOUR FIRST MINUTE

01 / Load an instrument

Place TUCCILLATOR on a MIDI/instrument track. Play a keyboard or the on-screen keys.

02 / Choose a sound

Browse the preset menu or use the previous/next arrows. Keep MASTER at a comfortable level.

03 / Make it yours

Try VCF FREQ, AMP ENV and CHORUS first. Save a useful variation with Save Preset.

Overview

A practical guide to the instrument and its controls.

Start with a clear reference

Follow the quick start, then change one control at a time. The interface images show example settings; use the text to choose a useful starting point.

Work through the controls

Each chapter brings the relevant controls together with a short listening exercise. Use the final reference section when you need a quick check.

IN THIS GUIDE

01 / Build the raw sound

02 / Control weight and brightness

03 / Shape the life of each note

04 / Add controlled movement

05 / Give the sound space

06 / Turn held notes into patterns

07 / Find, save and recall sounds

08 / Three sounds to build by ear

09 / Find the cause quickly

01 / Build the raw sound

Start here when a preset is close, but its basic character is wrong.



Interface detail / example settings.

DCO: OCTAVE, SAW and PULSE

The DCO is the oscillator: the basic sound source. OCTAVE changes its register. SAW gives a bright, full tone; PULSE gives a more hollow character. Both waveforms can be active together.

PWM and PWM SRC

PWM changes the pulse shape. MAN uses a fixed setting; LFO moves it repeatedly; ENV follows the filter envelope. The pulse waveform must be on to hear pulse-width changes.

SUB, SUB TUNE, QUANT and SUB OCT

SUB adds another low oscillator. SUB OCT chooses its octave; SUB TUNE adjusts its tuning. QUANT switches between stepped and continuous tuning. Add SUB for weight, then check the low end in the mix.

NOISE and GLIDE

NOISE adds an unpitched layer, useful for breath, grit and percussion. GLIDE makes pitch transitions smoother. Start low when a lead needs only a little movement.

DCO LFO: moving the pitch

The LFO slider in the DCO section controls how much the repeating modulation affects pitch. Keep it near zero for a steady note. Raise it gently for vibrato; a larger amount makes the pitch movement an obvious part of the sound.

Change the source before adding effects

For a useful comparison, reduce reverb and delay and play the same short phrase. Compare SAW alone, PULSE alone and both together. Then add SUB or NOISE separately. This makes it easier to hear which ingredient is doing the work.

TRY IT
Hold a low note. Compare SAW and PULSE, then add SUB slowly. Listen for weight rather than simply more volume. Save the result before trying a radically different tuning.

02 / Control weight and brightness

Two filters, two jobs: remove excess low end and shape the top end.





Interface detail / example settings.

HPF: remove excess weight

The high-pass filter removes low frequencies. Raise FREQ to clear mud or make a thinner texture. If a bass preset loses its body, lower HPF before changing the oscillator.

VCF: FREQ, RES, ENV, LFO and KEY

FREQ controls brightness by filtering highs. RES emphasises the area near that cutoff. ENV applies the filter envelope; LFO adds repeating movement. KEY makes the filter follow played pitch. ENV POLARITY reverses the direction of the envelope movement.

ENV and LFO are amounts, not speeds

VCF ENV decides how strongly the filter envelope moves the tone. Its timing lives in FILTER ENV. VCF LFO decides how much repeating movement reaches the filter; its speed lives in the LFO section. Start with one source at a time.

RES and KEY in a musical context

More RES brings attention to the cutoff area and can make a sweep sound more pointed. KEY helps brightness change with the notes you play. Compare a low and a high note while adjusting it, especially if one end of the keyboard feels dull.

A useful order for adjustments

First set HPF for the body you want to keep. Then set VCF FREQ for the resting brightness. Add a little RES, then ENV or LFO movement. Recheck the result in the arrangement: a dramatic solo sweep can cover another part.

TRY IT
Play a repeated short note. Lower VCF FREQ until it sounds dark, add VCF ENV, then shorten FILTER ENV decay. You should hear a brighter start followed by a darker body.

03 / Shape the life of each note

Loudness and brightness have separate envelopes. Give each a deliberate role.



Interface detail / example settings.

AMP ENV: shape loudness

ATTACK sets how quickly the note rises. DECAY sets how it falls to SUSTAIN, the level held while the key stays down. RELEASE sets how long it fades after you let go.

FILTER ENV: shape brightness

A separate envelope moves the filter. Use a short attack and decay for a pluck, or a longer attack for a slow opening. Turn up the VCF ENV amount to hear its influence.

Edit the envelope directly

Drag the points on the envelope graph or use the sliders. The decay point adjusts decay horizontally and sustain vertically. The sustain/release point adjusts release. The graph and sliders share the same settings.

VCA: ENV / GATE and LEVEL

ENV follows AMP ENV. GATE makes the note behave more like a held switch. LEVEL sets the voice level; MASTER sets the overall output. Check these if notes are unexpectedly quiet.

Sustain is a level, not a duration

ATTACK, DECAY and RELEASE describe time. SUSTAIN describes the level reached while you hold a key. Lower sustain for a note that settles back after its attack; raise it for a more continuous tone.

When an envelope seems to do nothing

For loudness changes, select VCA ENV rather than GATE. For brightness changes, raise VCF ENV and set VCF FREQ where there is room to hear movement. A wide-open filter can make an opening envelope difficult to notice.

TRY IT
Hold a chord with a long AMP ATTACK and RELEASE. Then use a fast attack, low sustain and short release. Keep the oscillator and effects unchanged so you can hear the envelope alone.

04 / Add controlled movement

The LFO repeats a gesture; the wheels let you add expression while playing.



Interface detail / example settings.

LFO: RATE, DELAY and SYNC

The LFO adds repeating movement. RATE changes speed; DELAY postpones its entry. SYNC locks speed to the host tempo. D means dotted timing, T means triplets. DCO LFO, PWM SRC and VCF LFO decide what it moves.

Choose the destination

DCO LFO moves pitch. PWM SRC set to LFO moves the pulse shape. VCF LFO moves brightness. These are separate amounts and choices: raising LFO RATE alone does not guarantee an audible change.

Free speed or musical timing

With SYNC off, adjust RATE by ear. With SYNC on, select a rhythmic division tied to the host tempo. Dotted and triplet choices shift the feel. Keep the rhythm simple while comparing a moving tone with your drums.

Let a note settle before it moves

Use LFO DELAY when you want a more stable beginning and movement later in a held note. Compare short and long notes: a delayed modulation can be subtle in a fast phrase and obvious in a sustained one.

Pitch and modulation wheels

The pitch wheel bends the played notes. The mod wheel adds vibrato. Try a held note first, then use small gestures inside a phrase. If pitch is moving unexpectedly, check the wheels as well as the DCO LFO amount.

TRY IT
Enable PULSE, select PWM SRC LFO and play a held chord. Adjust PWM and LFO RATE slowly. Compare this changing tone with pitch vibrato: they are different kinds of movement.

05 / Give the sound space

Use chorus for thickness, delay for repeats and reverb for a surrounding tail.



Interface detail / example settings.

CHORUS: OFF / I / II

Chorus adds stereo thickness and motion. I and II have different movement. Start with I, then compare II at similar loudness. Reduce other width effects if the sound becomes unfocused.

REVERB: TONE, LENGTH and MIX

TONE changes the colour of the space; LENGTH changes the tail; MIX blends it in. Long tails work for pads but can blur fast passages.

DELAY: TIME, FEEDBACK, MIX and SYNC

TIME controls echo spacing when unsynced. With SYNC on, choose a note division. FEEDBACK sets repeat length; MIX sets the amount. Lower feedback when echoes mask the next phrase.

Build one layer at a time

Start with CHORUS OFF and low delay and reverb MIX settings. Add chorus first, then choose whether the part needs distinct repeats, a continuous tail or both. Each layer should earn its place in the arrangement.

Keep fast phrases clear

If notes lose their separation, reduce REVERB LENGTH or DELAY FEEDBACK before removing all the effect with MIX. Shorter tails can retain atmosphere while allowing the next note to speak.

Compare at a useful listening level

A wider or denser sound can seem more impressive immediately. Keep MASTER comfortable and listen with the other instruments. Check the part in mono if the mix depends on it staying clear in the centre.

TRY IT
Play a short phrase, then stop. Listen to the tail. Lower delay feedback until repeats leave space for the next phrase, then bring in only enough reverb to join the sound together.

06 / Turn held notes into patterns

The arpeggiator makes movement from the notes you supply.



Interface detail / example settings.

ARP: ON, MODE, RANGE and RATE

Hold notes to feed the arpeggiator. Choose UP, DOWN or UP-DOWN and a range of one to three octaves. RATE sets free speed; SYNC uses a tempo division. The arpeggiator needs held notes.

ARP root, scale and AI EVOLVE

Root and scale constrain the held-note pool; SCALE OFF preserves the notes you play. AI EVOLVE develops repeating eight-step motifs with changing order, accents and note lengths. It is a local algorithm, not a cloud AI service.

DENSITY: how occupied the pattern feels

With AI EVOLVE active, DENSITY moves from sparse anchors toward more occupied steps. It does not change tempo. Keep RATE unchanged while comparing density settings so that you hear busyness rather than speed.

Start with a simple note pool

Hold a small chord and begin with SCALE OFF. Compare UP, DOWN and UP-DOWN at a one-octave RANGE. Then try a wider range. The notes you hold remain an essential input; ARP is not a play button for a self-contained song.

Root and scale

Choose the musical root and scale when you want the note pool constrained to a key. If a familiar chord comes out differently, return SCALE to OFF and compare before changing other settings.

Make evolution easy to hear

Establish a stable arpeggio first, then enable AI EVOLVE. Listen over several repetitions rather than judging one step. Its local, rule-based changes affect order, accents and note lengths; no account or internet connection is involved.

TRY IT
Hold three notes with SYNC on and a straight division. Listen with AI EVOLVE off, then on. Move DENSITY while keeping RATE fixed. Finish by returning to the simpler version and compare.

07 / Find, save and recall sounds

Keep useful variations before you move on to the next idea.



Interface detail / example settings.

Factory and user presets

Choose from 105 factory programs across Bass, Lead, Pad, Seq, Pluck, Chord and FX, plus the original sounds. Save Preset stores your variation. Internal preset changes keep MASTER in place; loading a DAW project restores its saved master value.

Saving your own preset

Open the preset menu and choose Save Preset.... Give the sound a name you will recognise, complete the save dialog, then find it under User Presets. A descriptive name such as Soft Pad - Short Tail is easier to revisit than a numbered experiment.

Presets and the DAW project

A preset is a reusable sound you can load into another instance. The DAW project saves the current plugin settings as part of the session. Save the project as well as the preset when the sound belongs to an arrangement.

MASTER stays put while browsing

Changing an internal factory or user preset preserves the MASTER position. That lets you browse at your chosen output level. Reopening a DAW project restores the master value stored in that project state.

Keep a before-and-after reference

Save the starting variation before a large edit. Change one group of controls, save a second version, then compare using the same MIDI phrase. This makes it easier to decide whether a different sound is actually more useful.

TRY IT
Load a factory sound, change the filter and envelope, then save it under a new name. Select another sound and recall your saved version from User Presets to confirm the workflow.

08 / Three sounds to build by ear

These are starting directions, not exact preset recipes.





Interface detail / example settings.

A rounded bass

Start with a low oscillator register and a little SUB. Keep NOISE low, HPF low enough to retain the body and VCF FREQ moderately closed. Use a quick AMP ATTACK and a controlled RELEASE. Add just enough filter-envelope movement to make the note speak.

A soft pad

Choose a full source, select VCA ENV and lengthen AMP ATTACK and RELEASE. Add a little chorus. Use slower filter movement and modest reverb. Play chords and listen for overlapping releases: TUCCILLATOR has six voices, so long tails and dense playing compete for them.

A clear pluck

Use a quick AMP ATTACK, lower SUSTAIN and a short RELEASE. Set a darker resting VCF FREQ, add ENV and give FILTER ENV a quick attack and shorter decay. Increase RES gently if you want the opening of the note to stand out.

Make each sound fit the part

A bass may need less width and space than a pad. A pluck in a busy pattern may need a shorter tail than a solo pluck. Shape the sound while playing the actual part, then save a useful version before exploring further.

TRY IT
Use the same source for a pad and a pluck. Change only the envelopes first. Then adjust the filter and effects. This separates note shape from tone and space.

09 / Find the cause quickly

Change one thing at a time and return diagnostic settings afterwards.

No sound

Check MIDI input and track monitoring, MASTER and VCA LEVEL. Ensure an oscillator or NOISE is active. Open VCF FREQ and lower HPF. If ARP is on, hold notes or disable it for a simple check.

Too dark, thin or unstable

Open VCF FREQ for more brightness; reduce HPF for body. Check SUB tuning if the low end seems out of tune. Reduce RES or modulation amounts if the tone moves more than expected.

ARP or sync behaves unexpectedly

ARP needs held keys. Confirm SYNC is on and check the selected division. D and T change the timing feel. Without host tempo, the instrument uses a 120 BPM fallback.

Notes hang or long tails build up

Use PANIC to stop voices, then check incoming MIDI and sustain. Shorten AMP RELEASE, REVERB LENGTH or DELAY FEEDBACK if sound continues longer than intended.

Working comfortably

Resize the window to scale the full interface. Double-click sliders to reset them. Preset changes replace sound settings, so save a useful variation first. Judge sounds in the arrangement as well as solo.

Use a known sound as a reference

If a heavily edited sound behaves strangely, save it first and load a familiar factory preset. If that plays normally, return to the edited version and check its source, filters, envelopes and effects in that order.

TRY IT
For silence, check the track and MIDI first, then MASTER and VCA LEVEL. Disable ARP for a direct keyboard check. For unwanted movement, inspect the LFO destinations and wheels before changing everything else.