

Vagabond

Version 1.1.0 (4)

A polyphonic wavetable synthesiser with 16 voices, four unison oscillators per voice plus a sub, a shared filter, a touch of modulation and some effects. Vagabond is idiosyncratic and a bit wilful, employing classic synthesis elements, but in no sense an emulation.

Dive carefully: beneath that plastic green surface lie hidden shallows.

Installation (macOS)

1. Open the DMG
2. Drag **Vagabond** to the **Applications** folder shortcut
3. Run **Vagabond** from Applications — this registers the Audio Units with the system
4. Vagabond is now available as an AU instrument, and Twelve as a MIDI processor, in any compatible host: Logic Pro, GarageBand, Reaper, Ableton Live, etc.

You only need to run the app once to register the AUs. After that you can load them directly from your host's plugin list.

Oscillators

Each of Vagabond's 16 voices has four unison oscillators around the target pitch plus a sub-oscillator one octave below. The oscillators interpolate through a table of eight waveforms, from a simple sine to bandlimited white noise. The waveform display at the upper left shows the live shapes for the current settings.

Knob	Description
Shape	Base wavetable position. 0 is the sine row at the start; 1 is the noise row at the end.
Detune	Unison detune spread around the target pitch, up to ± 50 cents.
Spread	Unison wavetable spread around the base Shape. At zero all four unison oscillators share the same shape; at full they range up to half the table away.
Boost	Amplitude of the sub-oscillator.

Filter

Stereo filter with switchable response and rolloff, shared by all voices. Channel aftertouch and polyphonic key pressure adjust the cutoff (depending on **Touch**).

Knob	Description
Frequency	Cutoff, 20 Hz – 20 kHz. (Upper bound may be constrained by host sample rate.)
Resonance	Q, 0.7 – 8.
Touch	Aftertouch / key-pressure depth on the cutoff. At zero, pressure is ignored; at one, full pressure pins the cutoff at its upper bound.

Switch	Description
LP / BP / HP	Filter response — low-pass, band-pass, or high-pass.
12 / 24	Rolloff slope, dB/octave.

Envelope

A linear ADSR envelope shapes each voice from key-down to release.

Knob	Description
Attack	ADSR attack time, 1 ms – 20 s.
Decay	ADSR decay time, 1 ms – 20 s.
Sustain	Held note level, 0 – 1.
Release	ADSR release time, 1 ms – 20 s. Updated live, so reducing it will shorten existing long tails.

Modulation

A single shared sinusoidal LFO drives most of the time-varying behaviour. An additional damped random walk adds slow organic detuning.

Knob	Description
Rate	LFO frequency, 0.1 – 20 Hz.
Motion	How much the LFO modulates Shape and Spread.
Spacetime	Per-oscillator rotating stereo pan and detune modulation.
Drift	Per-note tuning shift from a slow damped random walk. At full, each new note inherits an offset up to ± 25 cents.

Effects

Series chain after the filter: stereo delay → drive → velvet-noise reverb → saturator. The reverb sits inside the saturator so wet tails get the same gentle compression as the dry signal.

Knob	Description
Time	Stereo delay time, 0 – 1 second.
Echo	Stereo delay wet mix and feedback, 0 – 0.7.
Drive	Pre-saturation gain, 1 – 10.
Space	Reverb time (0.5 – 10 s) and wet mix (0 – 1).

Host App

The standalone app is a minimal AUv3 host that wraps Vagabond for direct play. The top and bottom strips (where the background is the darker green) belong to the host, not the synth itself. Other AU hosts (your DAW) will provide their own MIDI input and patch management.

Presets popup (top left) — factory presets above the divider, your saved user presets below. “Save” overwrites the loaded user preset (disabled for factory presets and when nothing has changed); “Save As...” writes a new one. User presets live in `~/Library/Audio/Presets/WalkyTalky/Vagabond/` — this is a standard location, any host that loads the AU should see the same set.

Play / Stop + BPM (centre) — drives the bundled Twelve demo (see below).

? (right) — opens the Help window.

Keyboard. Click and hold a key to play it. Drag up and down to send polyphonic key pressure for that note. (Mac mouse interaction can only press one thing at a time, so use the HOLD button to play more than one note at a time.)

Pitch bend. Vertical strip to the left of the keyboard. Drag the divider line up or down; release and it springs back home.

OCT. Chevron buttons shift the keyboard’s octave base up and down.

HOLD. When lit, latches notes. A fresh press latches the note; press again to release. Dragging a re-press sends pressure without releasing.

Twelve

Vagabond ships with **Twelve**, a 12-bar blues MIDI generator, as a second AU bundled inside the same app. Press **Play** in Vagabond’s top bar and Twelve will noodle a blues line into the synth for demo purposes. **BPM** sets the tempo.

The configuration in the Vagabond app is fixed and Twelve’s own UI isn’t exposed — but the embedded Twelve AU is also visible to outside hosts: load **WalkyTalky: Twelve** from any host that scans the Vagabond app’s extensions and you get the full control surface:

Knob	Description
Embroidery	Probability of adding bass runs, fills and turnarounds.
Easiness	In regular meters this swings the offbeat. In compound meters such as 12/8 it instead controls the drop rate of triplet middle notes.
Etiquette	Jazziness of the underlying chord progression.
Exotica	Aggressiveness of phrase mutation.
Emotion	Note density. At low values more notes are dropped for a sparser sound.
Evolution	Stylistic consistency of added phrases.
Root Note	Base of the chord progression, C – B.
Mode	Major or minor.

Twelve emits MIDI; route it to any instrument you like. (The Logic Pro sampler’s legacy Dobro Slide patch is a good choice.) Note that it only generates when the host is **playing**.

Knob Interaction

Drag diagonally to adjust: ↗ up and/or right to increase, ↘ down and/or left to decrease

Double-click (macOS) or **double-tap** (iOS) any knob to reset it to its default value

Knobs with a wide range, especially over several orders of magnitude (eg, 1 ms – 20 s), will typically have a logarithmic or tapered response.

About

Vagabond is an AUv3 Audio Unit instrument by [Matthew Caldwell](#). It runs on iOS and macOS. Part of the WalkyTalky suite.