ORION ARP HUNTER

Operation Manual — Shane TV





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1. What Orion Is

Orion Arp Hunter is a **note player** for Reason. It sits above an instrument in the rack, listens to the notes you hold down, and hunts a melody out of them.

The thing that makes Orion different from a normal arpeggiator is that it isn't one arpeggiator — it's **three engines running at once**, all chewing on the same chord:

Engine	Role
Anchor	The foundation. Usually the slowest and lowest — the bassline, the pulse, the thing the other two hang off.
Arp A	The lead voice. Usually faster and higher.
Arp B	The partner voice. It can run independently — or it can be *tied* to Arp A through **Duel Mode**, where it reacts to what Arp A just played.

Each engine has its own pattern, rate, direction, range and feel. On their own they're three arps. Chained through Duel Mode, they behave like two players listening to each other.

Orion is chord-driven, not transport-driven. It runs off the notes you hold. Play a chord and it starts; release and it stops. You do not need the sequencer rolling to hear it — hold a chord with the transport stopped and Orion plays. This makes it excellent live, and it means it follows a chord sequencer above it in the rack effortlessly.

Quick start: load a patch, put a synth under Orion, hold a chord. That's it.

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2. The Header

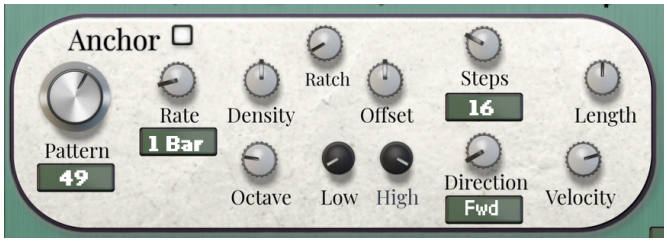


Along the top of the front panel:

- **ON** — Master power. When it's off, Orion becomes a **transparent wire**: your MIDI passes straight through, unaffected. Nothing is muted; the arps just stop.
- **Patch name / browser** — Standard Reason patch controls.
- **Pass** — Sets the velocity of incoming notes passed through to the instrument alongside Orion's generated notes. At 0%, only the arps are heard. At 100%, incoming notes retain their original velocity. Lower settings soften the dry notes without changing arp velocity. This controls note velocity, so its effect on loudness and tone depends on the instrument. Dry notes follow the incoming note durations; Latch does not sustain them.
- **Latch** — Remembers the input chord after its notes are released, allowing the arps to keep running hands-free. Once all input notes have been released, the next incoming note or chord replaces the latched chord. Latch holds the chord used by the arps; each generated note still follows its engine's Length setting. With a sequencer or chord device, leave Latch off to follow the source's note durations and gaps. Turn it on to keep the arps running between chords.
- **Multi (Time Mult)** — A global time multiplier that rescales *every* engine at once: **Half / Normal / Double**. Use it to shift the entire device into half-time or double-time without touching a single Rate knob.
- **Activity lamp** — Blinks when Orion is putting out notes.

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3. The Three Engines







Anchor, Arp A and Arp B have **the same set of controls**, so this section covers all three. Every engine has an on/off button by its name (red for Anchor, orange for Arp A, yellow for Arp B) so you can mute an engine without disturbing its settings.

Pattern

Selects the step pattern the engine walks through. There are **80 patterns**, running from simple up-and-down shapes into gapped, syncopated and signature rhythms. This is the single biggest character control on each engine — sweep it while a chord is held and you'll hear the whole personality change.

Rate

The engine's clock, in musical note values: **2 Bars, 1 Bar, 1/2, 1/2 D, 1/2 T, 1/4, 1/4 D, 1/4 T, 1/8, 1/8 D, 1/8 T, 1/16, 1/16 D, 1/16 T, 1/32, 1/32 D, 1/32 T** (D = dotted, T = triplet).

The three engines have **independent rates** — that's the point. A 1-bar Anchor under a 1/16 Arp A is the classic setup.

Density — *the important one*

Density is **bipolar**, with its resting point at the **center (50%)**. It does two different jobs depending on which way you turn it:

- **Center** — the pattern plays exactly as written.
- **Turn DOWN (below center)** — **thins the pattern out.** Notes are removed using a Euclidean distribution, so what's left stays musically even rather than randomly gappy. Turn it further and the part gets sparser and sparser. It never goes fully silent; a note or two always survives.
- **Turn UP (above center)** — **adds ratchets.** Steps begin retriggering as rapid repeats. They come in gradually and unevenly rather than all at once, so the part gets busier and more urgent as you push.

One knob takes an engine from skeletal to frantic. It's the fastest way to build or drop tension in a performance.

Ratchet Speed

Sets **how many repeats** a ratcheted step fires — from **2 up to 8**. This does nothing on its own; it only has an effect once **Density is pushed above center** and ratchets start appearing. Density decides *which* steps ratchet, Ratchet Speed decides *how hard*.

Steps

The length of the loop, from **1 to 64 steps**. This is your polyrhythm control. Set Anchor to 16, Arp A to 12 and Arp B to 7 and the three engines will drift in and out of phase with each other for bars on end before realigning.

Offset

Rotates the pattern against the beat — the pattern's contents stay the same, but its starting point shifts. Center is no shift; it swings **±32 steps** either way. Great for pushing an engine off the downbeat so it answers the others instead of doubling them.

Direction

Which way the engine walks the pattern:

- **Fwd** — forward
- **Back** — reverse
- **P-Pong** — ping-pong (up, then back down)
- **Random** — random step order

Because each engine has its own Direction, a forward Anchor under a reversed Arp A is an easy way to get contrary movement for free.

Octave

Transposes the engine by **−3 to +3 octaves**. The usual arrangement is Anchor low, Arp A high, Arp B in between — but inverting that is a good trick.

Low / High

The engine's **range limits**, in semitones, up to 48 semitones (4 octaves) apart. Notes that would fall outside the window are folded back inside instead of being dropped, so the engine keeps playing but stays in its lane. Use these to stop Arp A from climbing over your vocal, or to pin the Anchor into the bass.

Length

Note length — how long each note is held, from short and staccato to long and overlapping. Longer settings will overlap into the next note, which is how you get legato lines out of the arp.

Velocity

The engine's base velocity, before Accent and Humanize act on it.

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4. Global Feel



The three knobs in the middle of the panel shape all engines at once:

- **Humanize** — Adds random variation to velocity and timing. A little loosens the machine feel; a lot makes it genuinely unpredictable.
- **Accent** — Emphasizes the downbeats and pulls back the off-beats, carving a groove out of a flat pattern. At zero, every note is the same weight.
- **Swing** — Shifts the off-beats late. Center is straight; push it up for shuffle and triplet feel.

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5. Duel Mode



This is Orion's signature feature. **Duel Mode ties Arp B to Arp A** — instead of running its own independent line, Arp B *reacts* to whatever note Arp A just played.

The Duel Mode knob sits between the two arps with its readout below it.

Mode	What Arp B does
Off	Nothing — Arp B runs completely independently.
Mirror	Inverts Arp A's line around the bass note. A goes up, B goes down.
Counterpoint	Moves against Arp A, adding an interval when the two would collide.
Call & Resp.	A plays; B answers in the gaps. A conversation between the two.
Chase	B follows A a step behind, like a delay made of real notes.
3rds	B harmonizes a diatonic third above A.
Contrary	Strict contrary motion — whenever A rises, B falls.
Shadow	B trails A one octave below. A darker double of the lead.

Clone	B plays A's note but on its own rhythm.
Canon	B repeats A's line at a delay, like a round.
Oct Jump	B leaps A's note by octaves.
Drift	B wanders away from A and slowly comes back.
Burst	On the steps B plays, it fires rapid bursts. Aggressive.
Tension	B adds seconds and unresolved intervals against A. Uneasy and cinematic.

Duel Mode only affects **Arp B**. Anchor is never tied to anything — it always holds the floor.

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6. Root, Scale, and the Green LED



Below the Duel Mode knob are two readouts — **Root** and **Scale** — with a **green LED** between them.

Some Duel Modes only rearrange notes that were already in your chord. Others **invent notes that aren't in your chord** — a third above, a passing tension, a contrary step. Those modes need to know what key you're in, or they'll play wrong notes.

When the green LED lights, the Duel Mode you've selected is generating notes outside your chord, and the Scale control is doing real work. The LED lights on: **Mirror, Counterpoint, 3rds, Contrary and Tension.**

- **Scale = Auto** *(recommended default)* — Orion works out the key from the chord you're holding and quantizes to it. Follows any chord, in any key, with no setup. Root is ignored in this mode.
- **Scale = Off** — No quantizing at all. Free and dissonant; use deliberately.
- **Scale = a mode** (Maj, Dor, Phr, Lyd, Mix, Min, Loc) — Forces that mode. Now the **Root** matters:
    - **Root = Auto** — the mode re-centers on the bass note of whatever chord you play. **You stay pliable** — you can move through a whole progression and Orion follows, but every line is coloured by the mode you chose.
    - **Root = a fixed note** (C…B) — pins the key. The device will *not* follow your progression. Only use this when you want a fixed tonal centre no matter what you play.

The short version: leave **Root on Auto**. Leave **Scale on Auto** for maximum flexibility, or lock a **mode** with Root still on Auto when you want a specific flavour that still follows your chords.

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7. The Custom Display & Curve Editor



The large screen in the middle of the panel is Orion's most powerful — and most optional — feature. You can ignore it entirely and drive the whole device from the knobs. But when you want a parameter to *move* across the pattern instead of sitting at one value, this is where you draw that motion.

The Two Rows of Tabs

The display is navigated with two rows of tabs across the top.

Top row — what you're looking at:

- **Anchor, Arp A, Arp B** — the three engines, each in its own colour (red, orange, yellow).
- **Curve 1, Curve 2, Curve 3** — the three general-purpose CV curves that appear on the back-panel Curve outputs.

Bottom row — which parameter of that engine:

- **Rate, Den, Len, Oct, Vel, Ratch, Hum**

So the display always shows **one parameter of one engine at a time** — for example "Arp A → Vel." Tap a top-row tab to switch engines, a bottom-row tab to switch parameters. The active tabs are outlined with a thicker border, and the whole bottom row takes on the colour of the engine you're editing.

The Notes View

Select an engine's top tab but leave the parameter on the far-left/default position and the screen becomes a **notes visualizer** — a piano-roll-style readout of what that engine is actually playing in real time, drawn in the engine's colour. It's read-only; it's there so you can *see* the melody Orion is hunting out of your chord. If nothing is held, it reads "Waiting for sequence…".

The Curve Editor

Select any of the seven parameter tabs and the screen becomes an editable **curve grid** — one bar (column) per step. **Click and drag across the grid to draw.** The height of each bar sets that parameter's value on that step:

- **Rate, Den, Oct, Ratch, Hum** are drawn from the bottom up — bottom is the lowest value, top is the highest.
- **Len and Vel** are **bipolar** — a white centre line splits the grid. Drawing above the line is "more," below is "less," relative to a neutral middle. (Curve 3 is bipolar too, for use as a plus-and-minus modulation source.)

The number of columns follows that engine's **Steps** setting — a 12-step engine shows 12 columns, a 32-step engine shows 32. The curve is per-step, so it always lines up with the pattern length you're working in.

While a chord is playing, the column currently being sounded **lights up brighter** — a live playhead moving across your curve so you can see exactly where in the pattern you are.

How Curves Interact With the Knobs — the key rule

This is the part worth understanding clearly:

> **A drawn curve overrides its knob. An empty curve defers to the knob.**

Every parameter has both a **knob** and a **curve slot**, and they cover the same ground. Which one is in charge depends on whether the curve has anything drawn on it:

- **Empty curve (the default)** → the **knob** sets the value, and it holds that one value for every step. This is how a fresh patch behaves: all knobs, no curves.
- **Curve drawn** → the **curve** takes over for that parameter, step by step, and the knob for that one parameter stops doing anything.

It's a per-parameter handoff, not a global switch. If you draw a velocity curve on Arp A, then **only** Arp A's Velocity knob is superseded — every other knob on Arp A (and all its other curves) keeps working exactly as before. You can have Rate on a curve, Density on the knob, and Octave on a curve, all on the same engine at once.

A display quirk worth knowing: when a curve is empty, the editor still draws a flat row of bars at the height of the knob's current value. That's the display *showing you where the knob is sitting* — it is **not** a curve, and it is not overriding anything. Bars only become an active curve once you draw on them. (This is why an unedited parameter looks like "a curve set to a flat value" — it isn't; it's just the knob being visualized.)

Clearing a Curve

At the **top-right of the curve grid** is a small **red X in a white square**. Tap it to clear the curve you're currently viewing back to empty — which hands that parameter straight back to its knob. It only clears the one curve on screen; your other curves and all your knobs are untouched. This is the way to "reclaim" a knob after you've experimented with a curve and decided the static value was better.

In Short

- The knobs are the fast way to work, and for most patches they're all you need.
- Reach for a curve when you want a parameter to **evolve across the pattern** — a velocity swell, a filter-like density ramp, an octave that climbs and resets, an end-of-bar ratchet fill.
- Drawing a curve silently takes that one parameter off its knob; clearing the curve (red X) gives it back.
- Everything you draw is per-step and locked to the pattern, so it always stays musical.

8. The Back Panel



- **Gate Out / Note Out** — Per engine (Anchor, Arp A, Arp B). CV pitch and gate for each engine, so you can drive a separate synth or module from any single engine.
- **Curves Out** — A grid of CV outputs per engine, one for each parameter row (Rate, Vel, Den, Oct, Len, Ratch, Hum). These emit the engine's per-step values as CV — a free source of musically-locked modulation for filters, effects, anything.
- **Curve 1 / 2 / 3** — Three general-purpose CV outputs.
- **CV Inputs + Trims** — Every major engine parameter (Rate, Density, Ratchet, Length, Octave, Velocity) and the globals (Human, Accent, Swing) have a CV input with a trim pot beside it. The trim scales how much the incoming CV affects the parameter.

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9. Tips & Tricks

Start with the Anchor. Get a bassline you like on the Anchor alone with the two arps off. Everything else is decoration on top of that.

Density is your performance knob. Map it to a Combinator rotary. Turning Density down thins a part to almost nothing and turning it up drives it into ratcheting chaos — one control takes a section from an intro to a peak. It's more musical than a filter sweep because the *notes* change, not just the tone.

Ratchet Speed does nothing until Density is past center. If you're turning up Ratchet and hearing no change, that's why — push Density above 50% first.

Odd Steps are free polyrhythm. Leave the rates alone and just set different Step counts per engine (16 / 12 / 7). The engines phase against each other and generate bars of material that never quite repeats.

Use Offset to make engines answer instead of double. If two engines feel like they're playing on top of each other, don't change their rates — nudge one's Offset. They'll start trading instead of colliding.

Latch + Random + Drift = a generative machine. Turn on Latch, set the directions to Random, put Duel Mode on Drift, and hold one chord. Orion will keep hunting on its own indefinitely. Record a few minutes and harvest the good bits.

Half-time is the cheapest drama available. Take a busy patch and flip Multi to Half. Same notes, instantly enormous.

Watch the green LED. If it's lit and things sound wrong, your Scale is the culprit — that mode is generating out-of-chord notes. Set Scale to Auto and it'll snap into key.

Range limits keep engines out of each other's way. If Arp A keeps climbing into the same register as your lead, don't drop its Octave — pull its High limit down. It'll keep its shape but stay under the ceiling.

Orion plays with the transport stopped. Hold a chord with nothing rolling and the arps run. Great for auditioning patches, and great live.

Feed it a chord sequencer. Put a chord device above Orion in the rack. Because Root is on Auto in all the factory patches, Orion will follow your progression through every change without you touching a thing.

The engine outputs are separate for a reason. Take the Anchor's Note/Gate out to a bass synth and let Arp A and Arp B go to a pad. Now Orion is playing your whole arrangement, not just one instrument.

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shanetvmusic@gmail.com