

ORBS

CHAOTIC MODULATION · SIGNAL TRACKING

Max for Live Device · v1.0

Orbs is a chaotic modulation source for Ableton Live. Eleven independent outputs drift on their own, never repeating, each one mappable to any automatable parameter in your set. It is built on the mathematics of an analogue chaos circuit — three coupled integrator rings running at wildly different time scales, from seconds to over half an hour per cycle.

REQUIREMENTS

Ableton Live	Live 11 or later, Suite or with Max for Live
Max	Max 8 or later
Device type	Audio Effect — place on any track
CPU	Negligible. Runs at 40 Hz, no audio-rate processing

INSTALLATION

- 1 Unzip the download. Keep **Orbs.amxd** and its accompanying files together in one folder.
- 2 Drag **Orbs.amxd** onto any track in Live, or copy it into your User Library so it appears in the browser.
- 3 The orbs begin drifting immediately. Nothing needs to be armed or started.

THE TWO VIEWS

Device Face

The compact strip in your track chain. It shows all eleven orbs live and lets you map them directly. In the top-right corner is a small bracket glyph — click it to open the full window.

Floating Window

The full sky, at proper size, with all five controls beneath it. Orbs can be mapped from here too. The window floats above Live while Live has focus.

THE ELEVEN OUTPUTS

Each orb is an independent modulation signal. They fall into four groups:

GROUP	OUTPUTS	CHARACTER
Torpor	X · Y · Z	The fastest ring. A full cycle takes roughly 15–30 seconds.
Apathy	X · Y · Z	Mid-paced. Roughly 60–90 seconds per cycle.
Inertia	X · Y · Z	Glacial. Thirty to forty minutes per cycle. It barely appears to move.
Differential	+ · –	A rectified combination of all three rings. Sharper, more eventful.

Within each group, X and Y are genuinely different signals from different points in the circuit. Z is the inversion of Y — useful when you want two parameters moving in opposition.

READING THE ORBS

Colour is polarity, size is magnitude. ● **Red** is negative — the signal is below centre. ● **Blue** is positive. ● Blue-white is a strong positive peak. A dim violet orb is resting near zero.

MAPPING

- 1 **Click an orb.** A white ring flashes around it, confirming it is armed.
- 2 **Click any parameter in Live** — on any device, on any track. The orb begins modulating it immediately.
- 3 **To unmap, double-click the same orb.** Modulation stops and the orb is free to be reassigned.

BIPOLAR BY NATURE

Orbs modulates *around* wherever you have set the target parameter, not from zero. Set a dry/wet to 25% and the orb will swing above and below 25%. Set it to 75% and it swings around 75%. Where you leave the knob is the centre of the motion.

RE-ARMING

Each orb must be clicked again before every new assignment. Arming does not persist after a successful map.

CONTROLS

CONTROL	RANGE	WHAT IT DOES
Drift Rate	0.15× – 6×	Global speed. The centre position is the calibrated rate, matching the original hardware's timing. Scaled logarithmically, so the slow end has as much resolution as the fast end.
Gravity I	2.1 – 3.5	How tightly the first ring holds its orbit. Low values glide smoothly; higher values snap harder between extremes and dwell there longer.

Gravity II	2.1 – 3.5	The same, for the second ring.
Pull I	0 – 2	How much the second ring disturbs the first. At zero the rings are independent. Raise it and they begin to interfere with each other's motion.
Pull II	0 – 2	How much the first ring disturbs the second.

GRAVITY IS THE CHARACTER CONTROL

Around 2.2–2.6 the motion is smooth and organic — the most musical range for slow modulation. Push toward 3.5 and the rings spend more of their time pinned at the extremes, which is closer to a slow random gate than an LFO. Both are useful. The device will not let you go outside the stable range.

ORBS CAN BE MODULATED TOO

All five controls are automatable and mappable. An LFO can sweep Drift Rate. One instance of Orbs can modulate another's Gravity. Automation lanes work as normal. The device is designed to be driven as well as to drive.

NOTES ON USE

- **Inertia rewards patience.** Its outputs are for things that should change across a whole track — a filter that opens over ten minutes, a reverb size that drifts across a set.
- **Z outputs are for opposition.** Map Y to one parameter and Z to another and they will move against each other automatically.
- **The Differential outputs are the eventful ones.** They combine all three rings and produce sharper, less predictable movement than any single orb.
- **Nothing repeats.** There is no cycle length, no loop point, no reset. Two identical sessions will not produce identical motion.

TROUBLESHOOTING

Nothing moves	Check Drift Rate is not at its minimum. At the very bottom of its range the motion is extremely slow by design.
Mapping does nothing	Click the orb first — a white ring must flash before you click the target. Arming clears after each successful map.
Window hides behind Live	Expected. The window floats above Live while Live has focus, but will not stay above other applications.
Modulation feels shallow	Raise Gravity for a wider swing, or check that the target parameter is not already near the end of its range.

