Intellijel — Atlantix

- Manual PDF

Atlantix Manual PDF

Intellijel Atlantix + ATLX Expander: using them to create melodic parts

The **Intellijel Atlantix** is essentially a complete **dual-oscillator analog voice** in Eurorack:
- **VCO A** = main melodic oscillator
- **VCO B** = second oscillator or modulation source
- **Mixer** = blends waves and auxiliary signals
- **VCF** = tone shaping / articulation
- **Envelope + VCA** = note dynamics
- **Mods / S&H** = motion, variation, pseudo-sequencing
- **ATLX expander** = extra waveform/filter outs + ring mod access

For melodic music, this means Atlantix can function as:

1. a **full monosynth voice**
2. a **two-layer melodic source**
3. a **bass / lead / arp voice**
4. a **self-patching melodic generator**
5. a **hub for external sequencers, envelopes, and utilities**

What the module gives you for melody

1. A complete playable voice

Atlantix already contains the full chain you need:

Pitch CV → Oscillator(s) → Mixer → Filter → VCA → Output

Specifically: - Send **1V/oct** pitch to **PITCH A IN [1.A]** - Send gates to **GATE [5.A]** - Take audio from **OUT [5.G]**

With no extra patching, the internal normals already connect: - Mixer → VCF - VCF → VCA - Envelope → VCA - Envelope → filter modulation - Mod sources → oscillator/filter FM destinations

So for melody, this behaves much like a semi-normalled analog synth voice.

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2. Strong oscillator relationships for harmonic melody

VCO A

VCO A is the main melodic oscillator: - octave + fine tune - saw + pulse in the mixer - PWM - sync - exponential FM - thru-zero linear FM

This makes it great for: - classic lead lines - bass lines - sync leads - expressive FM timbres - evolving melodic tones

VCO B

VCO B can be: - another audio oscillator - an LFO - a pitch-following harmonic partner - a modulation source

The key melodic feature is the **PITCH SOURCE [2.3]** switch: - **A+B**: VCO B can follow PITCH A, optionally offset by PITCH B input - **B**: VCO B is independent

This is extremely useful for melody because you can make VCO B: - track the main melody in unison - track it at an interval - run independently as a second melodic line - act as a synced/fm modulator tied to the same keyboard/sequencer pitch

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Best melodic use cases

1. Classic mono lead voice

This is the most straightforward patch.

Patch

- Sequencer/keyboard pitch → **PITCH A [1.A]**
- Gate → **GATE [5.A]**
- Audio out → **OUT [5.G]**

Settings

- Bring up **SAW [3.2]** or **PULSE [3.1]**
- Set filter to **LP**
- Use envelope on filter with **ENV [4.3]**
- Set VCA mode to **ADSR [5.6]**

Why it works

Atlantix has the classic subtractive architecture for melodic leads: - harmonically rich oscillator - resonant multimode filter - ADSR contour - optional drive at the VCA

Variations

- Add **SUB [3.3]** for a thicker lead
- Add **NOISE [3.4]** very subtly for breath/grit

- Use **SYNC A SOURCE = VCO B saw** and **SYNC TYPE = HARD** for classic sync leads
- Use **DRIVE [5.7]** in SYM or ASYM for more aggressive solos

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2. Basslines

Atlantix looks especially strong for bass.

Why

- VCO A has **sub oscillator** options:
- -1 octave
- -2 octaves
- logical OR pulse-style sub
- Filter can be lowpass and resonant
- VCA drive gives weight
- Envelope can be very snappy in **FAST** mode

Patch

Same as mono lead: - Pitch → **PITCH A** - Gate → **GATE** - Audio → **OUT**

Suggested settings

- Mixer:
- **SAW** medium-high
- **SUB** medium-high
- maybe a little **PULSE**
- Filter:
- **LP**
- moderate resonance
- medium envelope amount
- Envelope:
- fast attack
- short/medium decay
- low sustain

- short release
- VCA:
- **ADSR**
- maybe **SYM** drive

Musical result

You get: - Moog-ish rounded bass - acid-like resonant bass - punchy techno bass - sync bass with bite

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3. Dual-oscillator interval leads

Since VCO B can follow pitch from VCO A, you can build richer melodic voices.

Method A: use VCO B as audio via AUX inputs

The mixer has two normalized AUX paths: - **AUX 1** can default to **VCO A triangle** or **VCO B square** - **AUX 2** can default to **VCO A sine** or **VCO B saw**

So you can bring VCO B into the main signal path without needing the expander.

Patch idea

- Pitch CV → **PITCH A**
- Leave **PITCH B** unpatched
- Set **VCO B PITCH SOURCE [2.3] = A+B**
- Tune **PITCH B [2.2]** to an interval:
- slight detune = thick unison
- +7 semitones ≈ fifth
- +12 semitones = octave
- Set **AUX 1 Source [3.10]** to VCO B square and raise **AUX 1 [3.5]**
- Or set **AUX 2 Source [3.11]** to VCO B saw and raise **AUX 2 [3.6]**

Result

One incoming melodic pitch controls both oscillators, but VCO B can be offset to create: - octave leads - fifth-based heroic leads - detuned unison leads - tuned drone-plus-lead combinations

This is one of Atlantix's strongest melodic features.

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4. Cross-modulated melodic timbres

For more advanced melodic parts, use VCO B to modulate VCO A.

Internal normal advantage

If nothing is plugged into **FM 1 IN [1.D]**, VCO A's FM 1 source defaults to **MOD X**.
MOD X can select VCO B waveforms.

So you can: - choose VCO B sine/triangle/saw/square as MOD X source - send that to VCO A FM1 internally - choose **TZFM** or **EXP** - control modulation depth with **INDEX [1.4]** - control dynamic FM amount with **IM [1.3]**

Melodic applications

Linear FM melodies

Use **TZFM** - good pitch stability - better for tuned melodic playing - rich but still musical harmonic movement

Exponential FM melodies

Use **EXP** - wilder and more vintage - pitch/timbre change together - better for expressive, unstable lines

Great musical setup

- VCO B follows VCO A pitch with **A+B**

- Tune VCO B to a simple ratio (unison, octave, fifth-ish)
- Use **MOD X = VCO B sine**
- Raise **INDEX**
- Modulate index with the envelope via the internal IM normal

This creates notes that start bright/complex and settle into a purer pitch—excellent for: - plucked FM tones - metallic melodic motifs - expressive synth leads

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5. Oscillator sync leads

VCO A supports both **hard** and **soft** sync.

Default normal

If nothing is patched to **SYNC A [1.B]**, VCO A can sync either to: - **VCO B saw** - or **GATE** depending on **SYNC A SOURCE [1.13]**

Melodic uses

VCO B as sync master

- Gives classic ripping sync lead sounds
- Sequence pitch into VCO A
- Let VCO B follow or offset pitch
- Sweep VCO A tuning for the signature sync harmonics

Gate sync

- Each note can restart the oscillator phase
- Great for percussive/plucky consistency
- Useful for tight bass or plucked melodies

Hard sync

Sharper, more aggressive, classic lead tone.

Soft sync

Smoother, less abrasive, still harmonically rich.

For melodic content, sync is especially useful when you want: - one-note leads with lots of movement - repeated sequences that need timbral animation - expressive filterless or lightly filtered solo lines

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6. PWM melodies

Atlantix gives VCO A pulse width and pulse width modulation.

Internal PWM normals

If nothing is plugged into **PWM IN [1.F]**, the source can be: - **VCO B sine** - **Envelope**

Melodic applications

Envelope PWM

- each note opens/closes pulse width
- great for plucks, brass-like leads, animated bass

VCO B PWM

- slow VCO B in LFO mode for moving pulse texture
- audio-rate VCO B for more aggressive harmonic animation

Because pulse width changes harmonic content dramatically, this is one of the easiest ways to make a repeating melody feel alive without changing notes.

Using the filter melodically

Atlantix's filter is not just a tone control—it can become part of the melodic identity.

1. Pitch-tracking filter

If nothing is patched into **FM 2 [4.B]**, the filter defaults to tracking **VCO A pitch**.

This is very useful for melody because: - higher notes can stay bright - lower notes remain warm - the voice feels more "played" across the keyboard

Use this for: - bass patches - expressive mono leads - patches with significant resonance

2. Envelope-shaped articulation

The envelope is normalled to the filter and scaled by **ENV [4.3]**.

This gives classic melodic articulations: - pluck - sweep - punch - vowel-like attacks

3. Multimode filtering for different melodic roles

- **LP**: best for basses and classic leads
- **BP**: focused, nasal, sequence-friendly
- **HP**: thinner melodic lines, useful in dense mixes
- **PHZ**: very interesting animated melodic textures

Phaser mode for melody

The **PHZ** mode can make repeating melodic parts more animated and spatial without needing a separate phaser module. Good for: - arps - sequences - hovering melodic ostinatos

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Using the envelope and VCA for phrasing

Atlantix's ADSR and VCA determine how "played" your melody feels.

Envelope ranges

Three rates: - **FAST** - **MED** - **SLOW**

This makes Atlantix suitable for: - short staccato basslines - medium synth leads - long evolving drones or ambient melodies

VCA modes

ADSR mode

Best for traditional melodic phrasing.

GATE mode

Makes the voice behave like an organ: - immediate on - immediate off

Great for: - chiptune-ish lines - mechanical sequences - external envelope control

Drive

The VCA has: - **SYM** - **X** - **ASYM**

For melody: - **SYM** = tighter, more centered saturation - **ASYM** = dirtier, more characterful harmonics

This can help a lead or bass cut through without extra modules.

How the MOD section helps melody

This section is where Atlantix becomes much more than a basic voice.

MOD X and MOD Y

Two assignable modulation outputs with: - 8 source choices each - unipolar/bipolar switching - polarity inversion

Defaults: - **MOD X → VCO A FM1** - **MOD Y → VCF FM1**

That means the module is already set up for dynamic self-patched melodic timbres.

Useful melodic modulation sources

You can choose for MOD X/Y: - VCO B sine/triangle/saw/square - sample & hold - noise - VCF - VCA or MIX depending on X/Y

Musical use cases

VCO B as LFO

Set **VCO/LFO [2.4] = LFO** Then MOD X or MOD Y can become: - vibrato - filter wobble - slow timbral drift

Audio-rate modulation

Set VCO B to audio Use MOD X/Y for: - FM tones - filter FM brightness - harsh or glassy melodic timbres

Using VCF or MIX as modulation

This creates feedback-like self-referential motion. Very useful for: - unstable evolving melodic tones - animated drones - living, semi-chaotic sequence timbres

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Sample & Hold for melodic variation

Atlantix includes S&H/T&H and noise, which can create melodic motion even without a traditional sequencer.

S&H basics

- **HOLD [6.A]** determines when sampling occurs
- **SAMP [6.B]** is the source being sampled
- **S&H OUT [6.C]** is the stepped result

If nothing is plugged in: - HOLD can default to **VCO B square** or **Gate** - SAMP defaults to **white noise**

Melodic applications

1. Random note generator

Patch: - **S&H OUT [6.C] → PITCH A [1.A]**

Then use: - quantizer externally if you want tonal notes - HOLD from gate for one new pitch per note - HOLD from VCO B square for clocked random stepping

This creates random melodies.

2. Per-note timbre variation

Instead of pitch, patch S&H to: - **VCF FM** - **Q** - **PWM** - **IM** - **FM 2**

This is often musically better than random pitch because the melody stays stable while each note gets a slightly different color.

3. Semi-random ornamentation

Use **Track & Hold** instead of Sample & Hold for more fluid, less rigid movement.

How Atlantix and ATLX work together musically

The **ATLX expander** adds significant melodic flexibility because it exposes many internal signals as dedicated outputs.

Extra oscillator waveform outputs

ATLX gives dedicated outputs for: - VCO A sine / triangle / saw / pulse - VCO B sine / triangle / saw / square - sub out - multiple filter outputs - ring mod out

This matters for melody because you can use Atlantix as a **voice plus source bank**.

1. Parallel melodic layers

Use the main **OUT [5.G]** as one complete melodic voice, while also taking: - **A SAW** - **B SIN** - **SUB** - dedicated filter outs

These can go to: - external VCAs - extra filters - effects - wavefolders - stereo processing

So one Atlantix sequence can become: - dry bass in the center - filtered sine octave layer - effected saw lead in parallel - sub reinforcement on another path

2. Multiple filter-output melodies

The expander gives: - **LP** - **HP** - **BP** - **PHZ**

This is excellent for building melodic texture: - use **OUT** as your main voice - send **BP out** to delay/reverb for a second melodic shadow - send **HP out** to distortion for bright harmonics - send **PHZ out** to stereo effects for width

A single melody line becomes a layered arrangement.

3. Ring modulation for tuned melodic overtones

The ring mod section has: - **X in** - **Y in** - **RING out**

Defaults: - X = Osc A sine - Y = Osc B sine

If VCO B tracks VCO A at a fixed interval, the ring mod can produce very musical sidebands.

Melodic use

- Tune VCO B to octave/fifth/other interval
- Use **RING out** as a second audio layer
- Mix it externally with the main voice

This can produce: - bell-like melodic doubles - metallic leads - tuned shimmer on bass notes - inharmonic but repeating melodic color

For melodic composition, the best approach is often not to use ring mod alone, but to blend it under the main voice.

Practical melodic patch ideas

Patch 1: Simple analog lead

Connections - Pitch CV → PITCH A - Gate → GATE - OUT → mixer/audio interface

Settings - SAW up - LP filter - ENV to filter moderate - ADSR mode - slight resonance

Result Classic subtractive mono lead.

Patch 2: Thick bass with sub

Connections - Pitch CV → PITCH A - Gate → GATE - OUT → output

Settings - SAW medium - SUB high - LP 4-pole - fast envelope - drive ON - filter tracking active via FM2 normal

Result Solid melodic bassline with good low-end focus.

Patch 3: Dual-oscillator interval melody

Connections - Pitch CV → PITCH A - Gate → GATE

Settings - VCO B pitch source = A+B - Tune VCO B to fifth or octave - AUX 1 source = B square or AUX 2 source = B saw - bring up AUX level - blend with VCO A waves

Result One-note melody with harmonic interval layering.

Patch 4: Sync lead

Connections - Pitch CV → PITCH A - Gate → GATE

Settings - SYNC A source = VCO B saw - SYNC TYPE = HARD - VCO B tracks A+B - Sweep VCO A pitch knob while playing - use filter sparingly

Result Classic tearing sync lead for melodic solos.

Patch 5: Musical FM pluck

Connections - Pitch CV → PITCH A - Gate → GATE

Settings - MOD X source = VCO B sine - FM1 uses MOD X normal - TZFM selected - VCO B tracks A+B - INDEX moderate - IM raised so envelope affects FM index - short envelope

Result Bright attack with harmonically rich but playable melodic notes.

Patch 6: Animated PWM melody

Connections - Pitch CV → PITCH A - Gate → GATE

Settings - Pulse up in mixer - PWM source = envelope or VCO B sine - moderate PWM amount - LP or BP filter - medium ADSR

Result Warm animated sequence or lead with organic motion.

Patch 7: Melodic voice plus parallel shimmer using ATLX

Connections - Pitch CV → PITCH A - Gate → GATE - Main OUT → main mix - ATLX RING OUT → reverb/delay return or second VCA - Optionally ATLX BP OUT → stereo effect path

Settings - VCO B tuned to interval from VCO A - Ring mod defaults to A sine and B sine

Result Main melody stays grounded, while ring mod and filter outs create a second melodic halo.

Best strategies for writing melodic music with Atlantix

1. Keep VCO A as the “pitch anchor”

For the clearest melodic result: - send your main sequence to **PITCH A** - let the rest of the module orbit around that pitch

This preserves musical coherence while allowing rich timbral movement.

2. Use VCO B for one of three jobs

VCO B is most effective when you commit it to a role: - **harmonic partner** - **LFO/modulator** - **audio-rate FM/sync source**

Trying to do all three at once can get chaotic.

3. Use modulation for articulation, not just complexity

For melodic parts, the best modulation destinations are often: - filter cutoff - PWM - FM index - resonance in small amounts

These preserve note identity while adding expression.

4. Use S&H for timbre, not only pitch

Random pitch can be fun, but random timbral variation often sits better musically. Try S&H to: - filter cutoff - Q - pulse width - FM depth

5. Use the expander for arrangement

ATLX is especially useful for taking one melodic part and splitting it into: - core voice - upper texture - sub reinforcement - effected duplicate

That is powerful for composition and mixing.

Summary

The **Atlantix** is very well suited to melodic music because it combines: - a playable main oscillator - a secondary oscillator that can track, offset, sync, or modulate - an internal mixer with useful waveform normals - a flexible multimode filter - ADSR/VCA articulation - self-patching modulation tools - random/held voltage generation - optional expander outputs for layering

In practice, it excels at: - **basslines** - **mono leads** - **sync solos** - **FM plucks** - **dual-oscillator interval melodies** - **self-evolving sequences** - **layered melodic textures with the ATLX expander**

If you want, I can also turn this into: 1. a **set of 10 specific melodic patches**,
2. a **quick-start cheat sheet**, or
3. a **signal-flow diagram showing how to patch Atlantix as a lead/bass voice**.

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