Intellijel — MultiGrain

- Manual PDF

Manual PDF: Intellijel Multigrain v1.2

Using Intellijel Multigrain to Create Melodic Components in Eurorack

The attached manual is for the **Intellijel Multigrain**, a **live stereo morphing granular sampler**. Even though it is not a traditional oscillator/VCO voice, it is extremely capable of producing **pitched, melodic, and harmonic material** when patched thoughtfully.

Below is a musician-focused analysis of how this module can be used to create melodic components in music.

What Multigrain is, musically

Multigrain is best understood as a **granular voice and sample-based sound source** with:

- **8 playable sounds**
- **2 scenes per sound**
- **morphing between scenes**
- **pitch control**
- **quantization**
- **CV-addressable sound selection**
- **syncable grain generation**
- **sample recording / live input processing**

So for melody work, it can act like:

- a **pitched sample voice**
- a **granular lead**
- a **chord/texture generator**
- a **quantized melodic percussion source**
- a **multi-sound pseudo-rompler**
- a **live resampling melodic processor**

Core melodic features

1. Pitch control

The most obvious melodic function is the **PITCH** parameter.

From the manual:

- Pitch spans **±2 octaves** from the knob
- With modulation, pitch can extend to **±3 octaves**
- Pitch can be modulated by **X / Y / Z CV**
- Full-depth modulation from X/Y/Z can give **1V/oct-style control**
- Fine tune is available on the **Alt Page**

Why this matters

This means Multigrain can be patched like a playable voice:

- send a sequencer CV to **X**, **Y**, or **Z**
- assign that mod input to **PITCH**
- set mod depth to full
- optionally enable the quantizer

That gives you melodic lines from any loaded sample or live sound.

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2. Built-in quantizer

The module includes a **per-sound pitch quantizer**.

You can:

- enable any notes in a 12-TET scale
- set a root note
- choose whether quantization affects:
- **pitch knob + modulation**
- or **modulation only**

Musical implication

This is one of the strongest melody-oriented features in the module.

You can use Multigrain as:

- a **scale-locked lead voice**
- a **harmonically constrained texture source**
- a **tonal sample player**
- a **melodic granular arp machine**

This is especially useful when granular playback would otherwise feel too unstable or atonal.

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3. 8 sounds as playable note colors

The **8 sound slots** are not just storage—they are part of performance.

Each sound can hold:

- its own sample or live source
- its own scene states
- its own quantizer settings
- its own fine tuning
- its own pitch/rate/size relationships

This allows:

- one sound per note family
- one sound per chord tone
- one sound per articulation
- one sound per section of a melody

For example:

- Sound 1 = soft vowel pad
- Sound 2 = plucked piano transient
- Sound 3 = bright string scrape
- Sound 4 = vocal chop
- Sound 5 = breathy flute attack
- Sound 6 = granular bell
- Sound 7 = noisy harmonic texture
- Sound 8 = low drone support

Then use **SELECT CV** or **NEXT** to sequence through them.

This gives melody a kind of **sample-orchestrated phrasing** instead of fixed timbre.

Best melodic patch approaches

A. Classic quantized granular lead

Patch

- Load a pitched sample into one sound
- good choices: sine-ish tone, flute, vocal, string harmonic, piano note, synth waveform
- Patch sequencer pitch CV into **X**
- Assign **X** → **PITCH** at full depth
- Enable **Quantizer**
- Set desired scale
- Use **GATE** input to trigger notes

- Keep:
- **SCAN** near center
- **WRAP** modest
- **SIZE** medium
- **RATE** low or linked carefully

Result

A playable melodic voice where each trigger produces a pitched grain or stream of grains.

Musical character

Compared with a normal oscillator, this gives: - more texture - more sample identity - more transient variation - more unstable or expressive tone

Excellent for: - leads - hooks - fragile melodies - cinematic top lines

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B. Multi-articulation melodic voice

Because each sound can be separately configured, you can create a **performance bank of articulations**.

Example setup

Use all 8 sound slots as versions of one instrument:

- Sound 1 = short pluck
- Sound 2 = soft sustain
- Sound 3 = reverse swell
- Sound 4 = filtered muted tone
- Sound 5 = wide blurred version
- Sound 6 = bright harmonic version
- Sound 7 = noisy attack version
- Sound 8 = lower octave variation

Then: - use one CV source for pitch - use **SELECT** or **NEXT** to choose timbre per note/event

Result

A single melodic line can feel much more alive, because timbre changes note-to-note.

This is especially strong for: - generative melodies - evolving ostinatos - “acoustic-like” phrasing - IDM / ambient / soundtrack writing

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C. Melodies from scanned sample regions

The **START / WRAP / SCAN** controls are very important musically.

These let you choose where the grains come from in the sample.

Melodic use

Instead of using a whole sample as one static source, you can load:

- a multisampled instrument phrase
- a vocal phrase
- a recording of several pitches in sequence
- a chord arpeggio
- a plucked riff

Then use:

- **START** to select a region
- **WRAP** to constrain the usable area
- **SCAN** to move through the region

Result

The melody is shaped not only by pitch CV, but also by **which fragment of the sample is being harvested**.

This can create: - melodic variation - pseudo-formant shifts - changing note attacks - phrase internal movement

This is one of the most “granular” ways to make melody feel alive.

D. Chord and harmonic melody source

Multigrain is stereo and sample-based, so it works very well with **chord samples**.

Technique

Load: - sustained chords - stacked intervals - vocal harmonies - orchestral clusters - synth stabs

Then use: - **PITCH** for transposition - **QUANT** to keep movement tonal - **SIZE–PITCH link** if you want content-preserving transposition behavior - **SCENE morphing** to move between harmonic densities

Result

You can generate: - chord pads - harmonic stabs - parallel harmonies - melodic phrases with built-in interval content

This is especially effective when your “melody” is really a **harmonized line**.

Scene morphing as melodic expression

Each sound has **Scene A** and **Scene B**, and the **Morph fader/CV** blends between them.

This is huge for melody, because it means one note source can have two states:

- Scene A = stable, centered, tonal
- Scene B = unstable, bright, scattered, reversed, blurred

Example uses

1. Phrase shaping

Use Scene A for verse-like clarity and Scene B for chorus-like expansion.

2. Dynamic articulation

Morph amount can act like an expressive control similar to: - bow pressure - breath intensity - filter opening - picking angle

3. Harmonic transformation

Because scene morphing also morphs modulation depths, you can go from: - static pitch - to heavily randomized pitch/scan behavior

without repatching.

4. Performance transitions

For melody, this is fantastic: - intro = pure sustained grain - buildup = more scan and blur - drop = tighter, brighter, percussive - outro = slow, reversed, diffused

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The two link modes are especially important for melodic use

RATE–SIZE link

When linked: - grain rate depends on grain size - smaller grains = faster triggering - larger grains = slower triggering

Melodic effect

This helps maintain more coherent texture as pitch material changes.

Useful when you want: - sustained notes with overlap - a more “playable instrument” feel - less manual balancing of size/rate

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SIZE–PITCH link

When linked: - pitch changes also affect grain duration so the same audio content stays inside the grain

Why this matters melodically

This is often the better setting for pitched material such as: - vocals - piano - plucks - acoustic notes - phrases

It preserves identity across transposition more naturally than simple independent pitch/size control.

For melodic patches, this can make the voice feel much more intentional and musical.

Using live sounds melodically

Version 1.2 adds **Live Sounds**, where any sound can derive grains from the live input via the Looping Recorder.

This is extremely useful for melody.

Live melodic use cases

1. Turn another oscillator into a granular melody voice

Patch an oscillator, voice, or external synth into **IN L / IN R**.

Then: - assign a sound as **Live Sound** - send pitch CV to Multigrain's pitch modulation - trigger via GATE - use quantizer if desired

Now your incoming audio becomes raw material for a new granular melodic layer.

2. Granular harmonizer

Feed in a monophonic melody from another module or external instrument.

Then use Multigrain to: - transpose it - quantize it - freeze it - generate new melodic material from it

3. Resample-and-play workflow

Capture a phrase, then: - assign it to a sound - transpose it melodically - scan different parts for note variation

This is a strong way to derive melody from field recordings, vocals, or other modules.

Using sound selection as a melodic sequencer dimension

Multigrain has three sound control inputs:

- **GATE**
- **NEXT**
- **SELECT**

These are not pitch CV, but they are still highly musical.

SELECT input

Maps 0–5V across sounds 1–8.

Melodic uses

If each sound contains: - a different pitch center - a different sample - a different harmonic region - a different articulation

then SELECT becomes a **meta-sequencer for melodic timbre**.

This can create: - timbral melodies - phrase alternation - call-and-response - note-family switching

NEXT input

Advances to the next occupied sound.

Melodic uses

This is excellent for: - stepping through tuned samples - rotating through chord tones - cycling through attack/sustain/reverse variations - creating pseudo-arpeggios

If you organize sounds carefully, NEXT becomes a **musical phrase rotator**.

Sample choices that work best for melody

The manual's sample guide is very useful here. For melodic work, the best sample types are usually:

Strong choices

- single sustained notes
- plucked instrument notes
- vocal vowels
- choral tones
- bell tones
- mallet hits
- waveforms or simple synth tones
- strings and harmonics
- short musical phrases
- multisample chains

Also strong

- stereo split samples with different content L/R
- chord samples
- arps and strums
- nature sounds with pitch identity
- breathy/noisy acoustic sources for expressive upper voices

Less straightforward

- very dense full-mix material
- samples with too much silence
- poorly trimmed one-shots

These can still be musical, but are harder to control melodically.

Best parameter strategies for melodic clarity

If your goal is melody, not pure texture, here’s how I’d approach the main controls.

START

Use to choose the musically useful part of the sample: - the onset for attack - the steady-state region for sustain - the tail for airy texture

WRAP

Keep fairly narrow for more stable note identity.

SCAN

- centered for stable tones
- slight movement for life
- large movement for phrase animation

SHAPE

For melody: - **Bell**, **Tukey**, or **Triangle** often feel most natural - **Square** and **Ramp** can be more effect-like

LEVEL

Straightforward note balancing.

TONE

Useful for fitting a melodic line into a mix: - lowpass for background lines - highpass for airy leads

RATE

- low rate for discrete notes
- higher rate for shimmer / sustained clouds

SIZE

- medium-to-long for recognizable pitch/body
- short for pointillistic melodic fragments

BLUR

Great for melodic ambience, but too much can smear note definition.

REVERSE

Excellent for alternate articulations and phrase endings.

Modulation strategies for melodic writing

Multigrain really shines when melody is not static.

1. Modulate pitch subtly

Use small modulation on pitch for: - vibrato-like movement - note instability - humanized phrasing

If you want real melodic accuracy, keep the main pitch under sequencer control and use subtle mod only.

2. Modulate START

This is one of the best melodic gestures on the module.

A little START modulation changes: - attack - spectral emphasis - vowel/formant character - sample micro-position

This makes repeated notes feel alive.

3. Modulate MORPH

For expressive phrase shaping, patch an envelope, slow LFO, or performance CV into **MORPH**.

4. Use random on non-pitch parameters

For melody, random is best applied lightly to: - START - TONE - LEVEL - SHAPE - SCAN

This creates variation without destroying tonal intent.

5. Be careful with random pitch

Unless you want aleatoric melody, random pitch should be restrained or quantized.

Quantized pitch modulation patch recipe

A practical melodic patch:

Patch

- Load a pitched sample into SOUND 1
- Sequencer CV → **X**
- Gate sequencer → **GATE**
- Assign **X to PITCH** at 100%
- Enable **Quantizer**
- Choose scale
- Fine tune sample root if needed
- Set:
- SIZE medium
- RATE low/moderate
- SHAPE bell/tukey
- WRAP narrow
- SCAN near center

Optional additions

- Envelope or pressure CV → **MORPH**
- Slow random → **START**
- Clock → **SYNC**
- THRU enabled with external source for hybrid layering

Result

A stable granular lead voice that remains musically scaled.

Using SYNC for melodic rhythm

The **SYNC** input does not quantize pitch, but it does quantize the grain engine rhythmically.

For melody this matters because rhythmic note structure often defines the phrase as much as pitch.

With SYNC enabled:

- RATE can divide/multiply clock
- Live sound grain position can quantize to clock multiples

Musical result

You can build: - clocked melodic pulses - sync’d granular arps - tempo-locked repeated notes - rhythmic harmonic clouds

This is very useful for: - techno - electronica - rhythmic ambient - generative melodic loops

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Multigrain as a melodic percussion instrument

Not all melody needs to be legato or tonal in a traditional way.

Using short samples and careful pitch sequencing, Multigrain can become:

- tuned percussion
- mallet voice
- kalimba-like line generator
- vocal chop melody source
- bell arp generator

Best approach

- short, trimmed samples
- lower RATE
- smaller SIZE
- quantized PITCH modulation
- clear envelope shape
- restrained BLUR

This works especially well for: - plucks - pointillist melodies - glitch-pop lines - percussive ostinatos

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Multigrain as a harmonic counterpoint generator

A very strong advanced use is to derive **countermelodies** from existing material.

Method

Feed in or sample: - a vocal phrase - a pad chord - a lead line - a sustained instrument note

Then: - retune it with quantized pitch CV - isolate different parts with START/WRAP - use scene morphing for articulation changes - select different sounds for contrasting phrase fragments

Result

Instead of writing a second voice from scratch, you generate one from related material, which often sounds more cohesive.

This is one of the nicest compositional uses of Multigrain.

Strong melodic workflows

Workflow 1: Granular lead

- One pitched sample
- X = pitch CV
- GATE = note trigger

- Quantizer on
- Morph for expression

Workflow 2: Sample-orchestrated melody

- Several sounds, each with different articulation/sample
- SELECT or NEXT changes timbre
- One shared pitch source

Workflow 3: Harmonic clouds

- Chord or choir samples
- Pitch sequenced and quantized
- Long size, moderate blur
- Scene morphing for density

Workflow 4: Vocal chop instrument

- Record or load vocal phrase
- Use START/WRAP/SCAN to isolate regions
- Pitch-sequence via X/Y/Z
- Quantize to scale

Workflow 5: Live harmonizer texture

- Live input as source
- Freeze loop
- Play it melodically with quantized pitch CV

Limitations to be aware of for melody

Multigrain is excellent for melodic material, but it is not a perfect substitute for a dedicated oscillator voice.

Things to keep in mind

- Pitch depends heavily on source material
- Some samples won’t transpose musically across wide ranges
- Granular behavior can reduce note definition if RATE/SIZE are too extreme
- Too much SCAN/WRAP/randomization can make pitch identity vague
- Blur can smear fast lines

So if you want very clear melody: - choose clean samples - tune carefully - use quantizer - keep grain parameters conservative at first

Then expand into more experimental settings.

Best companion module types for melodic use

If you're asking how this module can be used “together” with other Eurorack tools, Multigrain pairs especially well with:

Sequencers

For pitch CV into X/Y/Z and gates into GATE.

Quantized CV sources

Even though it has its own quantizer, external quantized modulation can also be useful.

Envelope generators

For dynamic MORPH control.

Clocks / trigger generators

To sync grain rhythm and stepping through sounds.

Audio sources / oscillators / samplers

For Live Sound input and resampling.

Mixers / VCAs / filters

To shape Multigrain like a full voice in a patch.

Reverb / delay / spatial tools

Though Blur exists, external effects can widen melodic context further.

Bottom line

The **Intellijel Multigrain** is a highly capable **melodic sound source**, especially if you think of it as a **granular instrument** rather than just a sampler.

Its strongest melodic assets are:

- **pitch control with CV**

- **built-in quantizer**
- **fine tuning**
- **sound selection by CV**
- **scene morphing**
- **live/sample hybrid sources**
- **expressive control over grain identity**

It excels at:

- granular leads
- harmonic textures
- melodic chops
- tuned percussive lines
- evolving sample-based phrases
- live-derived melodic resynthesis

If I were using it in a melodic patch, I would most often treat it as one of these three things:

1. **A quantized granular lead voice**
2. **A bank of timbrally shifting melodic articulations**
3. **A harmonic/countermelodic texture generator derived from recorded material**

If you want, I can also turn this into: - a **set of concrete patch recipes** - a **“best companion modules” guide** - or a **melodic use cheat sheet** for Multigrain.
