Mystic Circuits — IDUM

- Manual PDF

Manual PDF

Using Mystic Circuits IDUM to create melodic components

IDUM is primarily a **trigger/gate manipulation module**, but it can absolutely be used to create melodic structure when paired with a sequencer, oscillator, envelope/VCA, quantizer, or pitch source. The key idea is:

- **IDUM does not generate pitch CV itself**
- It **reshapes trigger timing and clock behavior**
- That means it can create melody by controlling:
- **when notes happen**
- **how long notes last**
- **which melodic lane is heard**
- **how a pitch sequencer advances**
- **when repeated or broken rhythmic phrases recur**

What IDUM does best for melody

From the manual, IDUM offers:

- 4 trigger inputs and 4 processed trigger outputs
- 1 clock input and 1 processed clock output
- 8 performance modes:
- Hold
- Burst
- Multiply/Divide

- Bouncing Ball
- Rotate
- Gate Delay
- Break
- Clock Skip
- A looper that records the last 8 steps of trigger/modification activity
- CV control over:
- Chance
- Mode
- Param
- Length
- Loop

So musically, IDUM is best understood as a **melody animator** rather than a melody source.

Core melodic patch concepts

1. Clock a pitch sequencer with IDUM's clock output

This is the most direct melodic use.

Patch

- Master clock → **IDUM clock input**
- IDUM **clock output** → pitch sequencer clock input
- Pitch sequencer CV output → oscillator 1V/oct
- One IDUM trigger output → envelope → VCA

Result

IDUM changes how the sequencer advances, so your melody changes without changing the programmed notes.

Best modes for this

- **Clock Skip**: skips or ratchets sequencer steps
- **Burst** / **Multiply-Divide**: can create denser trigger events around a melodic line
- **Looper**: freezes and replays interesting phrase fragments

Why this works

If the pitch sequencer contains a stable set of notes, IDUM can make it feel: - syncopated - fragmented - ratcheted - stuck and released - pseudo-arpeggiated

This is probably the strongest melodic application described or implied by the manual.

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2. Use trigger outputs to articulate multiple melodic voices

Because IDUM has **4 trigger channels**, each output can fire a different melodic voice or different articulation path.

Patch

- Four gate sources or one multi-lane trigger sequencer into TR1–TR4
- TR outputs from IDUM to:
- envelopes for different oscillators
- different LPGs
- different voices tuned to chord tones
- one envelope per transposition layer

Result

IDUM becomes a **melodic phrase router/shuffler**.

For example: - TR1 = root note voice - TR2 = third - TR3 = fifth - TR4 = octave or counter-melody

Then: - **Rotate mode** reassigns which input drives which output - **Gate Delay mode** creates strummed chord timing - **Hold mode** turns staccato notes into sustained drones or legato accents

This is especially effective for pseudo-polyphonic modular patches.

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3. Use IDUM to generate note density from sparse melodies

If you already have a simple melodic gate pattern, IDUM can make it more expressive.

Patch

- Simple trigger sequence into one or more TR inputs
- Corresponding pitch CV from a sequencer or keyboard
- IDUM output triggers an envelope controlling the melodic voice

Best modes

Hold

- Lengthens notes for legato lines
- Or probabilistically skips note events
- Great for turning rigid patterns into phrased melodies

Burst

- Ratchets single notes into repeated ornaments
- Excellent for acid-style trills, repeated plucks, or fast lead embellishments

Multiply/Divide

- Similar to burst, but based on trigger interval rather than clock
- More organic on irregular lines

Bouncing Ball

- Creates accelerating/decelerating note clusters
- Useful for fills, ornamentation, and glitch melody tails

These modes let one pitch become many articulations.

Mode-by-mode melodic uses

1. Hold mode

What it does: lengthens incoming gates or probabilistically skips them.

Melodic use

- Turn short plucks into sustained tones
- Create legato phrasing on a melodic sequence
- Thin out dense note patterns by skipping some notes
- Make one voice drone while others remain rhythmic

Good patch

- Pitch sequencer CV → oscillator
- Trigger sequencer → IDUM TR input
- IDUM output → envelope or LPG

Musical effect

- Counter-clockwise param: fewer note articulations, more space
- Clockwise param: longer notes, tied phrases, held accents

This is one of the best modes for expressive melodic phrasing.

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2. Burst mode

What it does: creates trigger bursts based on the clock.

Melodic use

- Ratcheting notes
- Repeated notes on one pitch step
- Ornamenting a melody line
- Turning occasional notes into fast trills

Good patch

- Single melodic gate stream into TR1
- IDUM TR1 output → envelope for voice
- Sequencer CV stays steady while the burst repeats articulation

Musical effect

- Great for techno, IDM, electro, acid, arp-like motion
- Can make a simple 8-step melody sound highly animated

If your oscillator pitch is changing with each sequencer step, the bursts will emphasize the current note. If pitch is sample-and-held elsewhere, the result can be even more complex.

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3. Multiply/Divide mode

What it does: changes burst speed based on the interval between recent incoming triggers.

Melodic use

- Makes melody articulation respond to the shape of the phrase
- Slower input notes can become dense repeats
- Uneven melodic rhythms become more alive and less grid-locked

Best for

- Humanized or irregular trigger sources
- Keyboard-generated gates
- Euclidean or probabilistic melodic rhythms

This mode is less rigid than Burst and often feels more “performed.”

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4. Bouncing Ball mode

What it does: creates accelerating or decelerating bursts.

Melodic use

- Grace notes
- Run-ups into a note
- Falling echo-like note repetitions
- End-of-phrase melodic flurries

Patch idea

- Send a sparse melody trigger pattern through IDUM
- Use Bouncing Ball on only occasional events via Chance
- Feed result to an envelope on a lead voice

Musical effect

- Works beautifully for glitch leads, prepared arpeggios, and expressive fills
- Can simulate hand-played ornamentation

This is especially good for melodic transitions rather than constant use.

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5. Rotate mode

What it does: scrambles the mapping of inputs to outputs.

Melodic use

This gets very interesting if each output corresponds to a different pitch or melodic function.

Patch ideas

A. Chord tone selector

- 4 outputs each trigger a separate envelope/VCA
- Each VCA opens a different fixed CV or oscillator tuned to:
- root
- third
- fifth
- seventh

Rotate changes which incoming rhythm plays which chord tone.

B. Multi-sequencer lane switching

- 4 outputs trigger 4 different sample-and-holds or envelopes
- Each lane corresponds to a different melodic contour

Musical effect

- Implied counterpoint
- Revoicing chords
- Rotating motif assignment
- Melodic call-and-response

This is one of the most compositionally rich modes for melodic work.

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6. Gate Delay mode

What it does: delays gates by varying amounts per channel.

Melodic use

- Strummed chords
- Flam-like double notes
- Offset canon lines
- Swinging one melodic layer against another

Patch idea

If four outputs trigger four pitch voices tuned as a chord: - TR1 = root - TR2 = third - TR3 = fifth - TR4 = octave

Gate Delay makes the chord “fan out” in time rather than striking simultaneously.

Musical effect

- Harp-like chord rolls
- Loose ensemble feel
- Stereo melodic spreads if panned

Excellent for adding sophistication to otherwise static harmonic patches.

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7. Break mode

What it does: applies preset rhythmic masks influenced by incoming triggers.

Melodic use

Though aimed at drums, it can also drive: - bassline gates - plucked lead patterns - modal ostinatos - sequence resets

Patch idea

- One sustained or repeated pitch sequence
- IDUM Break mode gates the melodic voice in breakbeat-derived patterns

Musical effect

- Turns a simple note row into syncopated melodic riffs
- Great for IDM, electro, and broken-beat bass patterns

Use this especially with short envelopes and bright timbres.

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8. Clock Skip mode

What it does: manipulates only the clock output, skipping or ratcheting clocks.

Melodic use

This is the most directly melodic mode if you are clocking a pitch sequencer.

Patch

- Master clock → IDUM clock input
- IDUM clock output → melodic sequencer clock
- Sequencer CV → oscillator pitch
- Separate IDUM TR output or another gate source → envelope

Results

- **Skip side**: sequencer jumps ahead, causing melodic leaps and phrase displacement
- **Ratchet side**: sequencer advances multiple times quickly, creating arpeggio-like runs

With CYCLE switch

- **CYCLE up** tries to return the sequencer to original position after modification
- **CYCLE down** allows drift

Musical interpretation

- CYCLE up = controlled variation
- CYCLE down = evolving melodic mutation

This is probably the best mode for creating changing melodies from fixed pitch material.

The looper as a melodic phrase tool

The looper stores the **last 8 steps of triggers plus modification activity** and replays them.

Why that matters for melody

You can improvise with IDUM until it creates an interesting melodic rhythm/clock mutation, then capture it.

Melodic uses

- Freeze a happy accident
- Turn an evolving pattern into a repeatable phrase
- Shorten loop length for ostinatos
- Scrub start point to shift phrase emphasis
- Change loop speed with PARAM
- Use CHANCE to decide whether saved modifications occur on each looped step

Patch idea

- Build an animated melodic sequence with Clock Skip + trigger processing
- Engage LOOP when the phrase gets interesting
- Reduce LENGTH for a 3- or 4-step motif
- Scrub the MODE control for phrase rearrangement

This makes IDUM useful not just as a chaos device, but as a **phrase capture and composition module**.

Best module pairings for melodic use

1. With an 8-step pitch sequencer

The manual itself shows this kind of patch.

Use IDUM clock output to alter the sequencer's step motion while a trigger output articulates the voice.

Good for: - basslines - lead riffs - arpeggio mutation - looping motifs

2. With a quantizer

If you use random CV, sampled CV, or transposition voltages elsewhere, IDUM can supply the articulation logic while the quantizer keeps things tonal.

Good for: - semi-random melodies - generative patches - controlled chaos

3. With sample & hold / switch modules

IDUM's trigger outputs can clock S&H modules or address sequential switches.

Good for: - changing pitch sources - selecting between melodic rows - rotating scales or transpositions

4. With multiple oscillators or chord voices

Using the 4 trigger outputs to fire multiple tuned voices makes Rotate and Gate Delay especially useful.

Good for: - chords - broken harmony - melodic percussion lines - contrapuntal textures

5. With envelope + LPG voices

Because IDUM is all about gates, it pairs naturally with plucked voices.

Good for: - marimba-like riffs - acid plucks - glitch melodies - modal ostinatos

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Practical melodic patch recipes

Patch 1: Mutating bassline

- Master clock → IDUM CL in
- IDUM CL out → pitch sequencer clock
- Pitch sequencer CV → VCO 1V/oct
- IDUM TR1 out → envelope → VCA
- Set mode to **Clock Skip**
- Set chance medium-high
- Set length short

Result: a stable bass sequence that occasionally skips ahead or ratchets into little runs.

Patch 2: Ratcheted lead line

- Keyboard or sequencer gate → IDUM TR1 in
- Pitch CV directly to oscillator
- IDUM TR1 out → envelope → VCA
- Clock into IDUM CL in
- Mode = **Burst**
- Param on multiplier side
- Chance moderate

Result: occasional repeated-note ornaments on your lead voice.

Patch 3: Strummed chord engine

- Four pitch voices tuned to chord tones
- Four envelopes/VCAs triggered by IDUM TR1–TR4 out
- Multi-lane trigger source into TR1–TR4 in
- Mode = **Gate Delay** or **Rotate**

Result: animated chord voicings with rolling or re-assigned note order.

Patch 4: Melodic breakbeat mask

- Regular gate pattern into TR inputs
- Pitch sequencer or fixed pitch set to a scale
- IDUM outputs trigger melodic voices
- Mode = **Break**
- Use different outputs for bass, mid, high plucks

Result: rhythmic melodic phrases with breakbeat logic rather than straightforward sequencing.

Patch 5: Captured motif looper

- Use any of the above patches

- Play with mode, chance, length until a phrase emerges
- Press **LOOP**
- Set loop length to 2–4
- Adjust speed with PARAM

Result: improvised phrase becomes a playable melodic motif.

Important limitations

IDUM does not output pitch CV

So for melody you still need: - a sequencer - a quantizer - a keyboard/ controller - random CV source - or tuned oscillators/chord structure

Clock-manipulated sequencers vary in compatibility

The manual notes: - simpler analog sequencers generally work better - complex digital sequencers may not respond ideally to clock manipulation - CYCLE behavior may vary by sequencer

For melodic use, this matters a lot. If your sequencer does not like skipped or burst clocks, use IDUM more on **trigger articulation** than on clock mutation.

Looper only captures one trigger per step

So very dense melodic ratchets may not be reproduced exactly in the looper.

Best musical roles for IDUM in melodic patches

IDUM shines as:

- a **melody articulator**
- a **phrase mutator**
- a **clock-based melodic variation tool**
- a **ratchet and ornament generator**
- a **trigger router for harmonic voices**
- a **phrase capture looper**

It is less a “write the notes” module and more a **make the notes alive** module.

Summary

If you use IDUM with melodic modules, the most effective strategies are:

1. **Clock a pitch sequencer from IDUM**
2. best for mutated basslines and lead riffs
3. **Use trigger outputs to fire melodic envelopes**
4. best for ratchets, phrasing, and articulation changes
5. **Assign the 4 outputs to different tuned voices or chord tones**
6. best for harmony, chord strums, and rotated motifs
7. **Use the looper to capture emergent phrases**
8. best for composition from improvisation
9. **Exploit specific modes musically**
10. Hold = phrasing

11. Burst = ratchets
12. Multiply/Divide = elastic repetition
13. Bouncing Ball = ornaments
14. Rotate = harmonic reassignment
15. Gate Delay = strums/canons
16. Break = syncopated melodic masks
17. Clock Skip = sequence mutation

If you want, I can also turn this into: - a **patch cookbook** - a **mode-by-mode melodic cheat sheet** - or a **“best companion modules for IDUM” guide**

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