Make Noise — MultiMod

- Manual PDF

MultiMod Manual PDF
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MultiMod (Make Noise) Cheat Sheet

Overview

- **MultiMod** takes one control signal, copies it to 8 outputs, and processes each with *independent* phase and speed adjustment.
- Internal LFO allows usage with nothing patched to input.
- Key concepts: **Spread** and **Phase** provide complex modulation from a single source.

Inputs & Outputs Reference

Jack	Function	Voltage Range
Signal IN	Main modulation source. Uses internal LFO if unpatched.	±10 V DC
HOLD IN	Gates to "hold" (freeze) current buffer.	>2 V (gate)

Jack	Function	Voltage Range
Phase CV IN	CV to automate phase (pot acts as attenuator).	±10 V (0–5 V = panel range, up to ±10 V extends range)
Reset IN	Gate to re-align phase/ positions (momentary reset).	>2 V (gate)
TEMPO IN	Clock input; quantizes Time, Phase, Spread & Outputs	>2 V (gate)
Spread CV IN	CV control over spread (with attenuverter).	±10 V (±5 V = panel range; up to ±10 V extends range)
Time CV IN	CV control over time (global speed).	±10 V (0–5 V = panel, beyond extends range)
CLK OUT	Clock output at current rate or division/multiple of external clock.	N/A
Channel Outputs 1–8	8 phase/spread modulated copies of input or internal LFO.	±10 V (nominal)
Channel Index OUT	1–8 V, indicating currently 'highest' channel (useful as CV/gate source).	1 V = Ch 1 ... 8 V = Ch 8

Knobs, Buttons, & Controls

Control	Description	Notes
Phase Panel Control	Manual phase offset for channel tap points	Combo pot with CV
Spread Panel Control	Sets spread of playback speeds (x8 to /8 per channel, inversely on each end)	Center (12:00) = no spread
Shape Button	Selects read or LFO shape (Ramp, Saw, Triangle, Sine, Square, Stepped & Smooth Random)	Color-coded
Time Panel Control	Sets global write/read speed or LFO rate	Combo pot with CV
Hold Button	Toggles HOLD function (freezes buffer)	Latching button
Reset Button	Resets all channels to current 'start' position	Momentary button
Spread CV Attenuverter	Adjusts depth/inversion of external Spread CV	-

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Voltage Ranges Summary

- **Input CVs**: Expect full-range support for ±10 V. Panel controls generally map to 0–5 V by default, beyond that increases range up to panel/digital limits.
- **Outputs**: All outputs are DC-coupled, ±10 V max per channel.

LED Color Reference

SHAPE (Shape Button/Window): - Red: Forward Ramp - Green: Saw (backward) - Blue: Triangle (Ping Pong) - Purple: Sine (Ping Pong Wow & Flutter) - Pink: Square (Staircase, in LFO mode = Square) - Orange: Stepped Random - Yellow: Smooth Random ("Ramplets")

CLOCK (Clock Window): - Red/Orange/Yellow/Green/Purple/Blue: Various speed indicators; quantized divisions/multiples when clocked.

CHANNELS: - Center Spread: White/Pink/Red/Purple (phase) - Spread active: Aqua/Green/Blue/Hot Pink/Yellow (speed: faster/slower/ multiplied/divided).

Quick Usage

1. **Patch a Control Signal or Use Internal LFO**: Leave Signal IN open for internal LFO.
2. **Shape Selection**: Use Shape button to pick waveform/shape or read path for processed outputs.
3. **Spread**: Center for uniform speed; clockwise/counter-clockwise spreads channel speeds (extremes go up to x8 or /8, more with high CV).
4. **Phase**: Adjusts phase offset between channels. Use CV for animation or external control.
5. **Time**: Sets overall buffer length / LFO speed. Clock with TEMPO IN.
6. **Reset & Hold**: Use Reset for realignment, Hold to freeze/loop.

Patch Ideas

- **"Shift Register"**: Spread @ noon, Phase full CCW, use for oscillator CV distribution w/ increased phase for staggered patterns.
- **"Snap Focus"**: Use TEMPO+RESET for periodic re-alignment of outputs.

- **"Noise Spectrum"**: Feed noise in, use outputs for colored/multispectrum noise.

Additional Resources

- **Generated With Eurorack Processor**