

Buchla and Tiptop Audio – 266t Source of Uncertainty

- [Manual PDF](#)

[Download the Buchla Tiptop Audio 266t "Source of Uncertainty" Manual \(PDF\)](#)

Creative Eurorack Patching With the Tiptop Buchla 266t "Source of Uncertainty"

The 266t is a deep and inspiring random voltage generator inspired by Buchla's classic 200 series, offering several modes of randomness—fluctuating, quantized, stored, sample & hold, noise sources, and an integrator. Here are creative ways to patch it with other modules for sonic explorations:

1. Animated Drone Generators

Patch Idea: Use *Fluctuating Random Voltages* to modulate the cutoff or resonance of a low-pass filter (e.g., Mutable Instruments Ripples, Doepfer A-120) processing droning oscillators (e.g., Make Noise STO, Intellijel Dixie).

- **Bonus:** Send slow, undulating random voltages to wavetable position or wavefold amount for slowly morphing textures.
- **Stack:** Use one output to modulate filter cutoff, another for amplitude via a VCA.

2. Non-Repeating Rhythmic Patterns

Patch Idea: Send the *Quantized Random Voltage* to sequence the pitch of a drum synth (Noise Engineering Basimilus Iteritas Alter), or to randomize the pattern on a retrigger input.

- **Trigger source:** Clock the Quantized Random section with a clock divider or random gate generator (ALM Pamela's Pro Workout, Mutable Marbles).
- **Use $n+1$ mode** for less change; use 2^n for wide, unpredictable jumps.

3. Randomized Melodies That Make Sense

Patch Idea: Take *Stored Random Voltage* (*right output*) and carefully shape its "curve" to weight certain pitches. Feed into a quantizer module (e.g., Intellijel Scales, Doepfer A-156) with a chosen scale.

- **Result:** Unpredictable but musically cohesive riffs and arpeggios.
- **Tip:** Modulate the "curve" with an LFO or envelope for evolving tone color and mood.

4. Chaotic, Evolving Percussion

Patch Idea: Use *Sample & Hold* outputs to modulate decay, pitch or filter settings on percussion modules (e.g., Tiptop 808 modules, Mutable Peaks).

- **Alternate Output:** Patch the "alt" outs to two different percussion voices for ping-ponging hits.
- **Timing:** Clock S&H with a slightly off-grid trigger/LFO for irregular groove.

5. Organic Timbral Variations

Patch Idea: Patch the *Integrator* output to a VCO FM input (e.g., DPO, Verbos Complex Oscillator). Use it to smooth a stepped random CV, which creates glissy pitch slides or slowly shifting FM intensity.

- **Control:** Modulate the Integrator's smoothing pot with an LFO for transitions between stepped and smooth randomness.

6. Noisy, Textural Soundscapes

Patch Idea: Use *Blue/Pink/White Noise* to feed granular samplers or spectral processors (Mutable Clouds, Make Noise Morphagene).

- **Effect:** Run the noise through reverb/delay for shimmering beds, or use as audio rate FM for digital harshness.

7. Unpredictable CV for Modulation Index or Morph Controls

Patch Idea: Randomly modulate West Coast-style FM/AM/PM index with *fluctuating* or *sample & hold* outputs for evolving timbres in FM/PM oscillators.

- **Pairing:** Pair with a stereo VCA/panner (Intellijel Quad VCA, Make Noise X-Pan) for spatialized chaos.

8. Self-Playing Generative Patches

Patch Idea: Mult several random outputs to various destinations: one to a quantizer → oscillator pitch, another to filter cutoff, another to VCA

envelope decay, another to clock delay times—resulting in endlessly surprising generative pieces.

- **Modules:** Add a random clock generator (e.g., Mutable Marbles, Pamela's Pro Workout), slew limiters (Make Noise Maths) for additional shaping, or use logic modules (Intellijel Plog, Doepfer A-166) to combine random gates with intentional triggers.

9. Randomized Sequencing

Patch Idea: Use random voltages to control steps or parameters of a sequencer (e.g., Doepfer A-155, Intellijel Metropolis) for unpredictable sequence order, skipping, or probabilistic play modes.

10. Random Audio-Rate Modulation

Patch Idea: Run *white* or *blue* noise to the FM input of oscillators for noisy, metallic, or static-rich tones. Or use *sample & hold* output at audio rates to impart digital randomness (bitcrush-type sound).

General Module Pairings

- **Quantizers:** for musical random voltages
- **VCAs/Envelopes:** for dynamic modulation
- **Filters & Effects:** for timbral shading
- **Logic Modules:** to combine or route random gates
- **Clock/Trigger Sources:** to drive sample & hold/quantized randomness
- **Complex Oscillators:** to maximize timbral possibilities

Feel free to experiment, stack modulations, and use subtle random sources for organic movement or full chaos for stochastic music.
