- Key data
- Original printed manual
- Features

  - Random gate generator

    - Master clock
    - Two-channel random rhythm generator

  - Random voltage generator

    - Quantized or smooth... CV Post-processor
    - Programmable quantizer
    - Output diversity

  - Random looping and shuffling
  - External CV processing
  - Specifications

Key data

Random sampler

Parameter	Value
Width	18HP
Depth	25mm
+12V current	80mA
-12V current	20mA
Lifetime	03/18 to 04/22
Modulargrid	Link
Processor	STM32F405RGT6 @ 168 MHz
DAC	DAC8164

Original printed manual

PDF download

Features

Random gate generator

Master clock

- Internal clock with adjustable rate (with V/O CV input), or division/multiplication of an external clock.
- Range selection button further multiplying or dividing the clock by 4.
- Rhythm follower/predictor to lock onto uneven clock divisions or rhythmic patterns.
- Adjustable jitter (knob and CV), going from perfect tracking to completely erroneous – but always preserving the overall tempo.

Two-channel random rhythm generator

- Three gate outputs: t_2 is the main output carrying the jittery clock, t_1 and t_3 are the complementary random rhythm output.
- Three generative models, with CV-controlled bias parameter increasing the density of notes on one channel or the other:
    1. Random routing of each clock pulse to either outputs, following a coin toss.
    2. Selection of a random division factor for one output, and the reciprocal factor for the other.
    3. Generation of random kick/snare patterns using a process similar to Grids.

- Adjustable gate duration, from short triggers to full length. Gate duration can be randomized.

Random voltage generator

- 3 outputs, either clocked by the 3 outputs of the random gate generator, or by a common external clock.
- Distribution control: **SPREAD** control, scanning between constant, bell-shaped, uniform or discrete distributions; and **BIAS** control biasing the generated voltage towards the bottom or top of the voltage range.
- Adjustable range: 0 to +2V (for melodies), 0 to +5V, -5V to +5V.

Quantized or smooth... CV Post-processor

- The **STEPS** parameter controls the steppiness/quantization of the output voltages.
- Turn this knob clockwise and a progressive quantizer is applied to the voltages - progressively reducing the probability of hitting a note outside of the scale, then making accidentals less likely, then giving more weight to the root and fifth - and at the extreme yielding only octaves.
- If steppy is not your thing, turn counterclockwise to increasingly slew the output voltages to the point that the module produces smooth, continuous curves.

Programmable quantizer

- 6 programmable scales.
- Scales are programmed by playing a short jam in the target scale: **Marbles** learns which notes are more prominent than others.

Output diversity

- The three outputs can all follow the settings dialed on the control panel, or react in different and opposite ways. The turn of a knob can completely push your patch towards a new direction!

Random looping and shuffling

- **DEJA VU** parameter increasing the probably of re-playing past material to the point that the generated output forms a loop... then increasing the probability of randomizing the order of this loop.
- The **DEJA VU** control applies to the random rhythm, the random voltages, or to both, or neither of them.
- Adjustable loop length from 1 to 16 steps.

External CV processing

- An external CV can be recorded in the **DEJA VU** loop in place of internal random voltages.
- All transformations performed by the random voltage generator (looping, shuffling, spreading, transposition, quantization, lag-processing) can be performed on external voltages.
- TLDR: live remixing of external sequences!

Specifications

- Analog random source.
- All inputs: 100k impedance, DC to 3.2kHz.
- Maximum input clock rate: 1kHz for the *t* Section, 8kHz for the *X* section.
- 32kHz refresh rate.
- 14-bit DAC with accurate software calibration - error below 1mV.
- 12-bit CV capture.
- Output levels: -5V to +5V for CVs (largest setting), 0V to +8V for gates.
- Input CV range: -5V to +5V.
- Front panel with Computer Modern labels, just like on your calculus textbook.