

ADDAC Systems – ADDAC-402

Heuristic Rhythm Generator

• [Manual PDF](#)

[ADDAC402 User Manual PDF](http://addacsystem.com/sites/default/files/ADDAC402%20User%20Manual.pdf)

ADDAC402 Heuristic Rhythm Generator – Cheat Sheet

OVERVIEW

4 independent gate/trigger channels. Generates rhythms with multiple patterns.
Visual feedback via OLED screen and LEDs.

FRONT PANEL CONTROL SUMMARY

Jacks

Jack Number	Label/Type	Function
:-----:	:-----:	:-----:
14	Fills/Parameter B CV Inputs	CV for Fills/Parameter B
15	Inverted Gate Outputs	Inverted gate/trigger
16	Gate Outputs	Main gate/trigger
17	Play/Pause Trigger Input	Clock in for play/pause
18	Clock Trigger Input	Master clock
19	Master Reset Trigger Input	Resets all sequences
20	Swing / Assign CV Input	Assignable CV input

Knobs & Encoders

- **Preset Selector & Menu Scroll (3):** Select/load/save presets, sequence numbers, etc.

- ****Swing/Assign (4):**** Default = swing, assignable per config, act
- ****Steps / Param A (7):**** Adjust steps/parameter A (per channel/al
- ****Fills / Param B (8):**** Adjust fills/parameter B, attenuator whe

****Buttons****

- ****Mode Info/Menu/Enter (2):**** Short = info/menu select; Long (3s)
- ****Play/Pause (5):**** Start/stop transport
- ****Skip Step (10):**** Skip/rotate current channel pattern
- ****Resets (11):**** Reset individual voice sequence to start
- ****Master Reset (12):**** All voices reset to step 1
- ****Mode Select (13):**** Advance to next mode

****Toggles****

- ****Gate/Trigger Switches (9):**** Per-voice, sets output as gate or

****Visual****

- ****OLED Display (6):**** Parameters and current pattern feedback
- ****LEDs (1):**** Per-channel gate state

**ALGORITHMS / MODES**

Cycle with Mode Select button, in this order:

1. ****Euclidean:**** STEPS = total steps, FILLS = # of "on" steps, SKI
2. ****Gate Sequencer:**** Up to 32 steps/channel. STEPS = pattern leng
3. ****Game of Life:**** FILLS=#bars, SKIP=next gen, RESET=new pattern,
4. ****Golomb Rulers:**** FILLS=choose ruler, outputs marks at unique i
5. ****Probabilistic:**** FILLS=probability%. Probability "used up" seq
6. ****Footwork:**** STEPS=trigger length, FILLS=main controls (see scr
7. ****Pong:**** Ball bounces per wall triggers channels 1–4. Pad size,

****Preset Management:****

Up to 16 patterns (presets) per mode (Euclidean, Gate Seq). Use Pre

CONFIGURATION MENU

Long-press the Menu button for config options. Key assignments incl

- Trigger time (2–32 ms)
- Gate time (fractions of step)
- Assign what the Swing/Assign knob and CV control (can be SWING, P
- MIDI bridge config (needs expansion module)

Swing:

- **Default:** Delays steps for groove.
 - 1st 1/4 = swing on every 3 clocks
 - 2nd = 4, 3rd = 6, 4th = 8
- **Assignable:** Knob or 0–5V CV

JACKS – DETAILED REFERENCE

JACK	DIRECTION	SUMMARY
Gate Out (x4)	OUT	Main gate/trigger output
Inverted Gate Out	OUT	Inverted logic of gate output
Fills/Param B CV	IN	Per-voice Fills/Param B CV
Swing/Assign CV	IN	Global assignable CV (see config)
Play/Pause Trig	IN	Gate or trigger to start/stop
Clock In	IN	External clock input
Master Reset Trig	IN	Gate/trigger resets all patterns

TIPS

- Knob values only "take over" after crossing the saved value when
- Manual swing is global, per-trigger/gate (delay every Nth clock d
- All CV inputs: 0-5V recommended, 0V = min, 5V = max.
- Save/load per-mode; configurations are remembered at power up/dow
- In algorithms where STEPS/FILLS are inactive, CV/knobs do nothing

LINKS

- [Official ADDAC402 Manual PDF](<http://addacsystem.com/sites/default/files/ADDAC402%20Manual.pdf>)
- [Generated With Eurorack Processor](<https://github.com/nstarke/eurorack-processor>)