ADDAC Systems — ADDAC-506 SignalFlow

- Manual PDF

ADDAC506 VC Stochastic Function Generator & Expansion Manual (PDF)
Cheat sheet generated from reference diagrams and descriptions.

ADDAC506 VC Stochastic Function Generator & Expansion

Quick Reference Cheat Sheet

OVERVIEW

- **4 Independent function generator/envelope channels**
- **Randomized Rise & Fall times (with min/max limits), voltage controllable**
- **Sum, Average, and Random CV outputs**
- **Flexible operation: Slew/Trigger, Loop/Oneshot, Curve, Amplitude, Offset**
- **Expansion for external random retriggering**

PANEL CONTROLS

Per Channel (x4):

Control	Type	Details
Initial	Knob	Manual envelope amount; voltage range per envelope: 0V to 10V
CV Input	Jack	Accepts CV, gate, trigger, or audio (Bipolar ±10V typical)
CV Input Attenuverter	Knob	Amount and polarity of CV input modulation (-1 to +1 range)
Rise Time Min	Knob & CV	Sets minimum randomized rise time (0–10V normal range); CV input/ attenuverter
Rise Time Max	Knob & CV	Sets maximum randomized rise time (0–10V); CV/attenuverter
Fall Time Min	Knob & CV	Sets min randomized fall time (0–10V); CV/attenuverter
Fall Time Max	Knob & CV	Sets max randomized fall time (0–10V); CV/attenuverter
Envelope Curve	Switch	Logarithmic ↔ Linear shape selector
Amplitude	Knob	-10V to +10V envelope level (center = 0V; max span 10Vpp)
Offset	Knob	-10V to +10V shift (envelope baseline) (center = 0V)
LEDs	Output	Visual envelope monitor (bipolar; shows amplitude/polarity)

Control	Type	Details
Lock Button	Button	Locks channel Rise/Fall settings from accidental changes
Loop / Oneshot	Toggle	Envelope retriggers itself (Loop) or single cycle (Oneshot)
Slew / Trigger	Toggle	Slew: follows input CV; Trigger: one-shot envelope cycle per input

---

GLOBAL CONTROLS

Control	Type	Details
Speed Range	Switch	Low / Medium / High (overall envelope responsiveness)

JACK REFERENCE

Per Channel (x4):

Jack	Direction	Details	Voltage Range
Channel Input	Input	CV, gates, triggers, or audio accepted	±10V
CV Output	Output	Envelope output	-10V to +10V
Gate Output	Output	HIGH while in rise, LOW otherwise	0V/5V
	Output		

Jack	Direction	Details	Voltage Range
End of Rise (EOR)		Pulse at end of rise segment	0V/5V or Gate (jumper)
End of Fall (EOF)	Output	Pulse at cycle end	0V/5V or Gate

Mixer/Global Outputs:

Jack	Direction	Details	Voltage Range
Average Mix Output	Output	Average of all 4 envelopes	-10V to +10V
Summing Mix Output	Output	Sum of all 4 envelopes	-40V to +40V (all channels maxed)

Expansion Jacks (per channel):

Jack	Direction	Details	Voltage Range
Random Trigger Input	Input	Re-randomizes Rise & Fall time at any point	0V/5V
Random CV Output	Output	Actual random Rise/Fall control CV for the cycle (selectable)	0V to 10V

Miscellaneous

- **Jumper on each Random CV Output:** Selects if jack outputs Rise or Fall random value.

- **Envelope time randomization:** Happens at new cycle trigger or via expansion random input.

OPERATION HINTS

- **Set Rise/Fall Min above Max:** Envelope time is fixed to Min knob (no random).
- **Lock/Unlock Button:** Lock channel settings to tweak only the one you want.
- **Slew mode:** Use as a voltage follower for any signal, not just gates/triggers.
- **Visual feedback:** Use LEDs to watch envelope shape and output.
- **Mix & route:** Combine channels for complex modulation; sum/average/join outputs.

VOLTAGE RANGES

- **Envelope Outputs:** -10V to +10V (bipolar, with amplitude and offset).
- **CV Inputs:** ±10V optimal.
- **Gate/EOR/EOF Outputs:** Typically 0V (inactive) or 5V (active).

PATCH IDEAS

- Use random CV outs for modulating other modules with true cycle-to-cycle randomness.
- Inject audio or noisy CV sources in Slew mode for envelope following/vactrol-like behavior.
- Lock some channels and randomize others for patch variety.
- Use sum/average outputs for macro modulation controls.

Reference: Github: Generated With Eurorack Processor
