

Doepfer – A-148

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[Doepfer A-148 Dual S&H Manual PDF](#)

Doepfer A-148 Dual S&H – Cheat Sheet

Quick Overview

The Doepfer A-148 is a dual Sample & Hold (S&H) and Track & Hold (T&H) module. It can generate random or stepped voltages for controlling other modules. Each of the two identical sections can be independently set to S&H or T&H by internal jumpers (for modules manufactured from Aug 2005 on).

Panel Controls & Features

| Label | Type | Function | Voltage Range |
|---------|------|---|-----------------------|
| Trig In | Jack | Input for the trigger signal (sampling clock) | Any A-100 trigs/gates |
| Smp In | Jack | Input for the signal to be sampled/held | -12V ... +12V |
| S&H Out | Jack | | |

| Label | Type | Function | Voltage Range |
|----------------------|--------|---|---------------|
| | | Output for the sampled and held (or tracked and held) voltage | -12V ... +12V |
| LEDs | Visual | Shows the polarity of the output voltage (+ LED: positive, - LED: negative) | N/A |
| Jumper (int.) | Header | Sets upper/lower circuit to S&H or T&H mode (default: Upper = S&H, Lower = T&H) | N/A |

How it Works

- **Sample & Hold (S&H):** At each positive edge on Trig In, the voltage at Smp In is "captured" and held until the next trigger.
- **Track & Hold (T&H):** The output follows the input while Trig In is high; when Trig In goes low, it holds the last value.

Input/Output Reference

Inputs

- **Trig In**
- **Type:** Gate/Trigger input
- **Purpose:** Determines when to sample Smp In
- **Smp In**
- **Type:** CV/Audio input
- **Purpose:** Signal to be sampled or tracked
- **Voltage Range:** -12V to +12V (modules after Aug 2005; previous versions: -8V to +8V)

Outputs

- **S&H Out**
- **Type:** CV output
- **Purpose:** Output the last sampled/tracked value
- **Voltage Range:** Follows input within -12V to +12V (post-2005)

Typical Patch Examples

1. **Random Arpeggios:**
2. Patch white noise (A-118) to Smp In, LFO to Trig In, S&H Out to VCO CV.
3. **Glissando:**
4. Keyboard CV through slew limiter to Smp In, LFO to Trig In, S&H Out to VCO CV.
5. **Random Filter:**
6. Noise to Smp In, keyboard gate to Trig In, S&H Out to filter CV input.

Version Differences & Jumpers

- **Pre-Aug 2005:** Max input/output voltage range -8V to +8V.
- **Post-Aug 2005:** Full A-100 range, -12V to +12V, and S&H/T&H selectable via jumpers JP2 (upper), JP3 (lower).

Useful Tips

- **LEDs** helpful for monitoring whether the last held voltage is positive or negative.
- **Voltage Range:** Always ensure input voltages are within Doepfer's -12V to +12V standard.
- **Mode Setting:** Factory default is S&H (upper), T&H (lower).
