

Overview

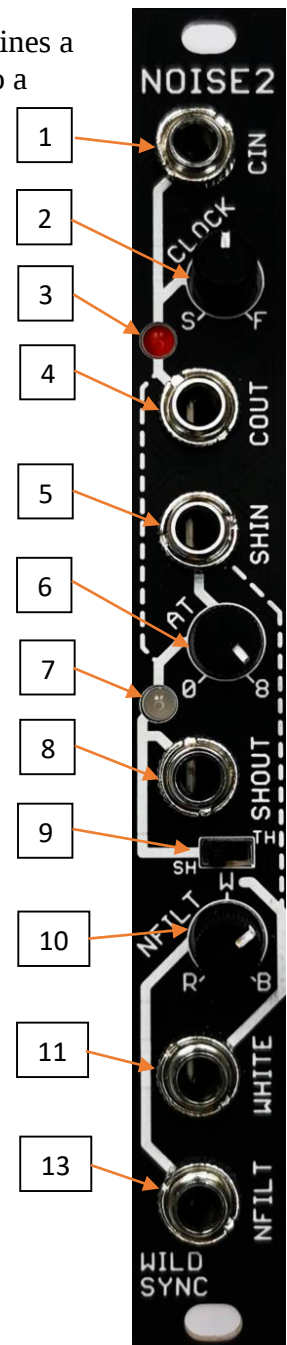
WS Noise2 is a compact yet powerful **3HP Eurorack module** that combines a **clock generator**, **sample & hold / track & hold**, and a **noise source** into a highly versatile utility. Despite its minimal size, Noise2 offers deep functionality for adding **randomness**, **rhythmic triggers**, **modulations**, and **textural variations** to any patch. It's ideal for everything from melodic sequencing and generative CV to glitchy digital artifacts and bitcrushed chaos.

Main Functions

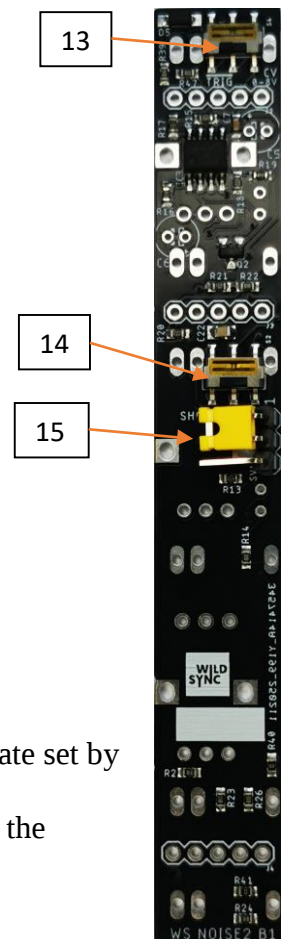
- Internal **Clock Generator** with variable timing and external control options
- **Sample & Hold / Track & Hold** with input attenuation and internal noise normalization
- Dual **Noise Outputs** – white and filtered
- Switchable modes and ranges via **rear panel toggles and jumpers**
- Compact design – **perfect for small or dense systems**
- Useful for **random CV**, **trigger sequencing**, **digital noise**, **bitcrushing**, and more

Front Panel Elements

1. **TRIG / CV Input Jack**
Accepts either trigger signals or control voltage (0–8V) depending on mode (set via rear switch)
2. **CLOCK Potentiometer**
Adjusts the internal clock speed
3. **Clock Output LED**
Blinks to indicate outgoing clock/triggers
4. **CLOCK Output Jack (COUT)**
Outputs clock signals at the rate set by the CLOCK knob
5. **S&H Input Jack (SHIN)**
External signal input for Sample & Hold; internally normalized to noise source if nothing is patched (features $\times 3$ gain)
6. **S&H Attenuator (AT)**
Controls the input level going into the Sample & Hold
7. **S&H Output LED**
Bipolar LED shows the polarity and intensity of the sampled voltage



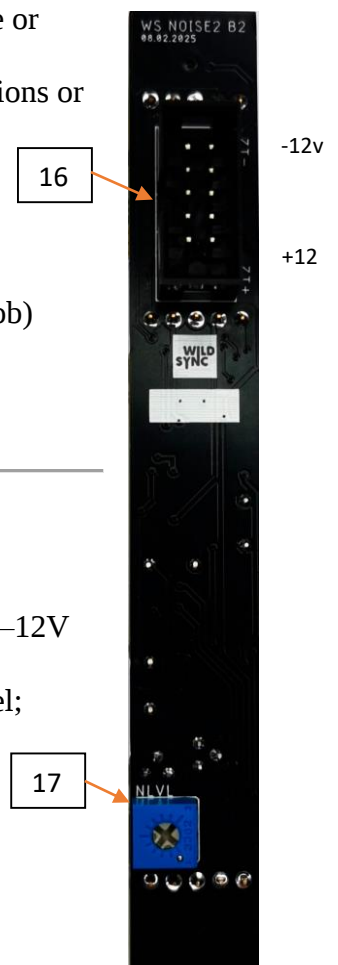
8. **S&H Output Jack (SHOUT)**
Outputs the sampled or tracked voltage
9. **S&H / T&H Mode Switch**
Switches between Sample & Hold and Track & Hold modes
10. **Noise Filter Potentiometer (NFILT)**
Adjusts the tone of the filtered noise output
11. **White Noise Output Jack (WHITE)**
Outputs unfiltered white noise
12. **Filtered Noise Output Jack (NFILT)**
Outputs tone-shaped noise affected by the NFILT knob



Rear Panel Controls (Mode Switches & Jumpers - Board B1)

13. **TRIG / CV Mode Switch**
Selects how the **TRIG/CV input** operates:
 - **TRIG mode:** external triggers control the S&H circuit independently; internal clock continues to output at the rate set by the **CLOCK** knob
 - **CV mode:** incoming CV (0–8V) modulates the speed of the internal clock generator
14. **S&H Speed Range Switch (SHORT / LONG)**
Adjusts the time range for the S&H section:
 - **SHORT:** enables fast update rate — great for digital noise or **bitcrusher-like** effects
 - **LONG:** traditional S&H behavior, good for slow modulations or pitch stepping
15. **Noise Source Jumper (WHITE / FILTERED)**
Selects the type of noise normalized to the S&H input when nothing is patched:
 - **WHITE:** standard white noise
 - **FILTERED:** tone-shaped noise (controlled by NFILT knob)

Note: These settings only affect internal comutation to SHIN.



Rear Panel Controls (Board B2)

16. **Eurorack Power(10-pin)** – 16-pin Eurorack standard connector; –12V pins are located at the top
17. **NLVL Noise Level Trimmer** – Adjusts overall noise output level; factory preset to standard 10 Vpp

Use Cases & Creative Tips

- **Random CV Generator:** Use internal clock and noise-normalized S&H for evolving modulation
 - **Bitcrusher Mode:** Set S&H to SHORT and feed it smooth CV like an envelope for stepped artifacts
 - **Digital Noise:** Run fast clock and monitor S&H output without any input
 - **Melodic Randomness:** Clock the S&H from a sequence, send output to VCO pitch
 - **Texture Control:** Use filtered noise as audio or mod source, adjust tone via NFILT
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Technical Specifications

- **Width:** 3 HP
 - **Depth:** 35 mm
 - **Power Consumption:**
 - +12V = 29 mA
 - -12V = 11 mA
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<https://wildsyncgear.com/>