



HATZ USER MANUAL





INTRODUCTION:

Hi-hats are typically rich in complex, inharmonic frequencies that create a metallic, shimmering sound. Hi-hats rely heavily on noise components to create the "sizzle" effect. While analog circuits can generate white or colored noise using transistors or diodes, it's difficult to get the noise characteristics exactly right for hi-hats. Designing a noise source that consistently produces the correct quality and amount of noise can require fine-tuning and careful component selection. Hi-hats need a very quick attack and controlled decay to emulate the sharpness of a real cymbal. In analog circuits, achieving precise control over these fast transients is challenging.

Hatz v3 it's a analog circuit including 2 types of noises "Metals" generates stable, high-frequency square wave oscillations, which are essential for the metallic, bright tone characteristic of hi-hats. "Texture" generates a unique, digital form of noise that has a slightly "stepped" quality, adding a texture that's not as smooth as white noise but offers a desirable grit.

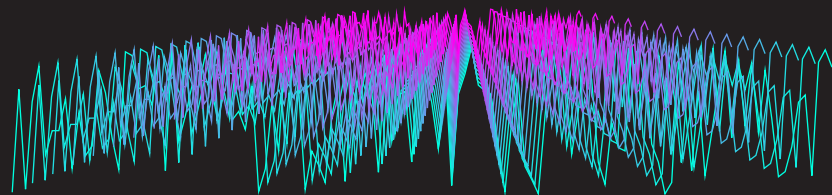
Independent envelopes for precise transient shaping, and a bandpass filter for frequency control—contributes to a complex, high-quality hi-hat sound.

This design approach provides flexibility, realism, and tonal richness that elevates the hi-hat beyond basic analog percussion.

INSTALLATION:

- * Disconnect your synth from the power source.
- * Double check polarity from the ribbon cable. Unfortunately if you damage the module by powering in the wrong direction it will not be covered by the warranty.
- * After connecting the module check again you have connected the right way, the red line must be on the -12V





INSTRUCTIONS

- | | |
|--|---|
| A Output Closed Hi-Hat | O Closed Hi-Hat Freq Ctrl |
| B Trigger Input Closed Hi-Hat | P Open Hi-Hat Freq Ctrl |
| C Trigger Input Open Hi-Hat | Q Open Hi-Hat Envelope Decay Ctrl |
| D Output Open Hi-Hat | R Closed Hi-Hat Envelope Decay Curve |
| E Closed Hi-Hat Freq CV Input | S Metals Noise Amount Ctrl |
| F Accent Input | T Texture Noise Tune Ctrl |
| G Texture Tune CV Input | U Open Hi-Hat Envelope Decay Curve |
| H Open Hi-Hat Freq CV Input | |
| I Choke Switch | |
| J Closed Hi-Hat LED | |
| K VCA Closed Hi-Hat Input | |
| L Open Hi-Hat LED | |
| M Open Hi-Hat Envelope Decay CV Input | |
| N Closed Hi-Hat Envelope Decay Ctrl | |

