

Dagger

Freq-Mod

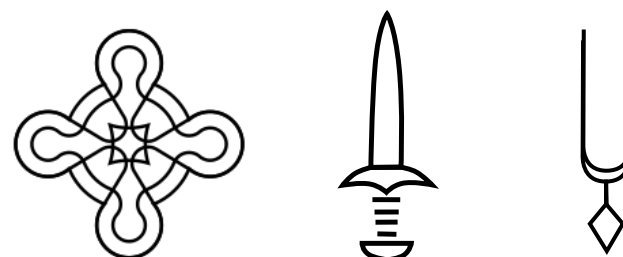


Overview

The electric guitar sounds stark compared with the harmonic liveliness of the lute and vihuela but the length of the sustain is much longer and allows for slower passages to be played. This circuit enhances the harmonic field of electric signals as a sort of analogue to a double coursed acoustic instrument without losing the lasting sustain inherent to solid bodied instruments.

The carrier signal is modulated by a voltage controlled triangle (dagger) oscillator with a discrete OTA, allowing a very wide frequency spectrum to be tuned in without any differing in waveshape. Temperature induced pitch fluctuation is a side effect of the discrete components which sweetly resembles the detuning of an instrument as the wood expands and contracts and the pegs loosen as it is plucked and strummed.

The encoded signal has a compressed attack envelope and a delay of about 42ms, it is evenly mixed with the twice inverted input so that the brightness of the signal is not lost in the darker daggerwaves. The effected waves appear at the output with daggers protruding above and below. Centering the harmonic field to a carefully tuned pitch creates bellish overtones and detuned phasing effects.



Controls

Dagger controls how deep to cut, it is the depth of modulation. It may get a little hairy fully clockwise.

Tuning fork, it covers a wide frequency spectrum, this is the pitch modulating the frequency of the carrier. Tune carefully and tune often. Temperature fluctuations alter the pitch.

Technical

- input impedance - 100k Ω
- output impedance - 1k Ω
- power supply 9-9.6 VDC
- current draw 21 mA
- 51% dry/encoded blend
- 42mS encoding delay
- lead free RoHS compliant
- centre negative 2.1mm
- 1/4" quality audio jacks
- truly bypassed
- 119 x 93 x 34mm dimensions

Warranty

I will repair or replace any malfunctioning product for a period of 2 years after purchase date. Problems resulting from modifications or misuse may cancel this warranty. After 2 years, repairs cost a reasonable fee. The owner will cover all shipping expenses.