Analog Ring Modulator

User Manual

-Introduction

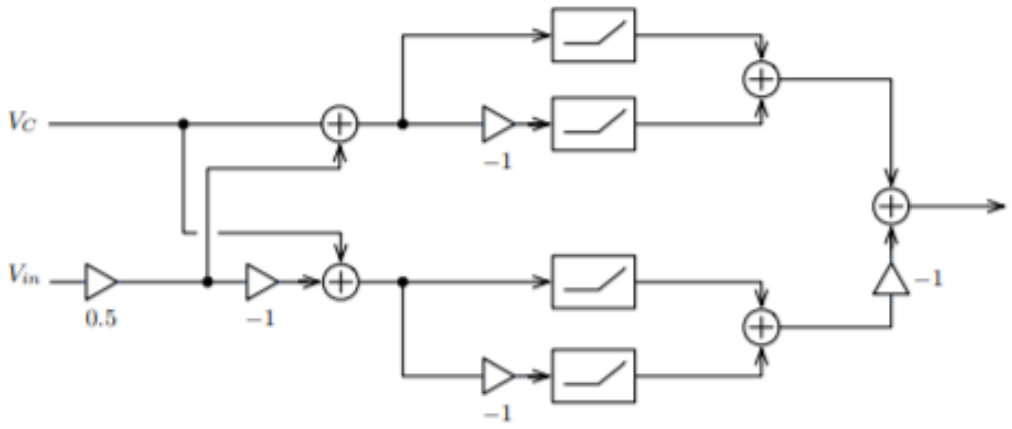
Welcome

Thank you for choosing Analog Ring Modulator! In order to get the most out of your Analog Ring Modulator, please take the time to read through this manual.

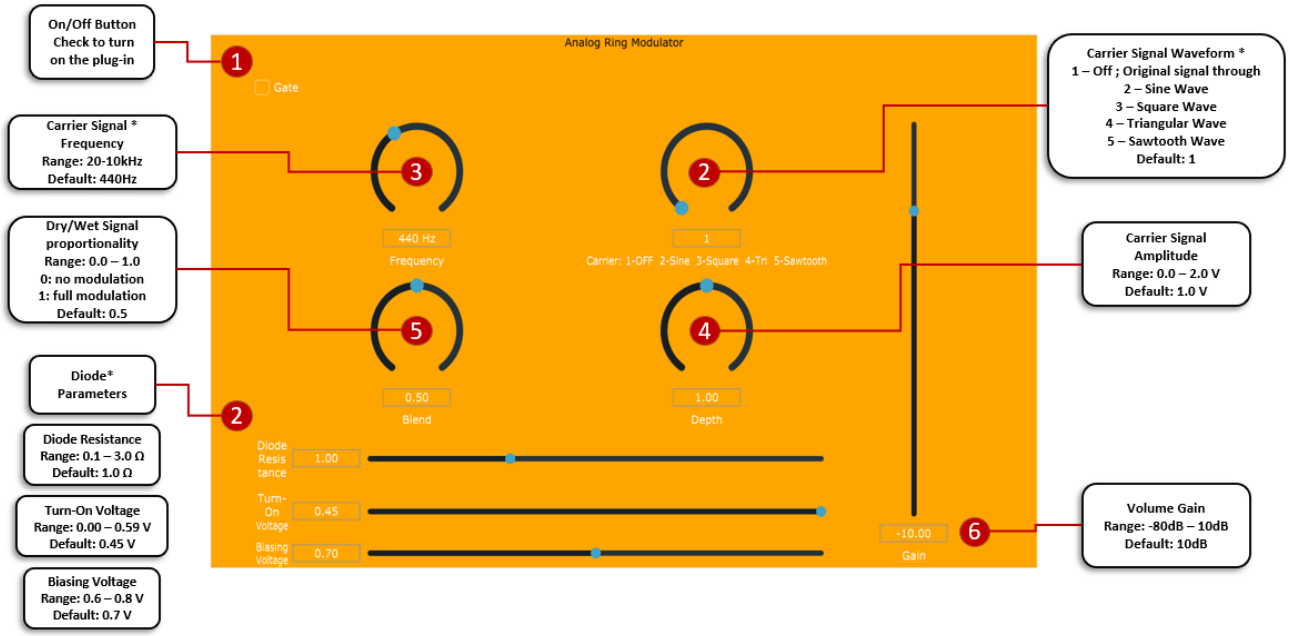
Product Overview

Analog Ring Mod is a digital ring modulator trying to mimic the characteristic of a physical analog ring modulator. It does not use the traditional method of Amplitude Modulation, instead, it takes into consideration the non-linearity of diodes and mimics their input-output relationships. Users are given the following options: carrier signal frequency, carrier signal waveform, depth (amplitude of the carrier signal), blend (dry-wet mix proportionality), and volume gain. To differentiate from the current existing ring modulator plug-ins on the market, Analog Ring Mod also offers users options to customize their ring modulator plug-in. By changing the diode parameters inside the Analog Ring Mod plug-in, users can reproduce their favorite models of analog ring modulator digitally.

Plug-in Block Diagram



-Quick Start Guide



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- Carrier Signal

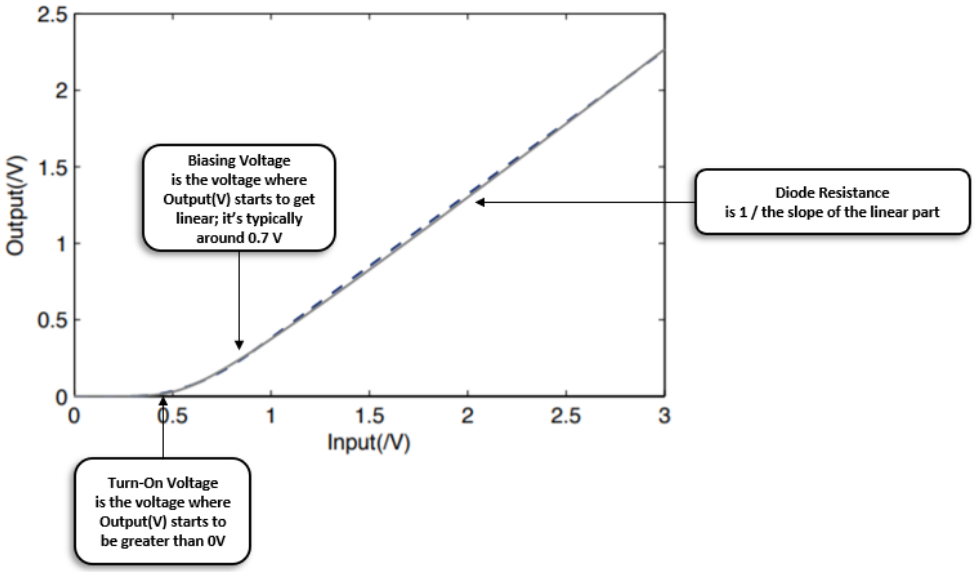
For more information of carrier signal and ring modulation mechanism, please go to the following website: https://en.wikipedia.org/wiki/Ring_modulation#:~:text=In%20electronics%2C%20ring%20modulation%20is,the%20signal%20to%20be%20modulated

- Signal Waveform

For more information of carrier signal and ring modulation mechanism, please go to the following website:

https://en.wikipedia.org/wiki/Waveform#:~:text=In%20electronics%2C%20acoustics%2C%20and%20related,of%20any%20displacement%20in%20time.&text=The%20term%20can%20also%20be,signals%2C%20like%20chirps%20and%20pulses

- Diode



For more information of carrier signal and ring modulation mechanism, please go to the following websites:

https://learn.sparkfun.com/tutorials/diodes/all#real-diode-characteristics

https://en.wikipedia.org/wiki/Diode

It is recommended to check out the diode spec sheet to get the diode parameters for the diode used in your preferred analog ring modulator.