

# Centripidity

## Rectifier



## Introduction

Any voltage input to this module will be, as the name implies, rectified before output. That is, an ac signal is converted to dc. There are two outputs, one provides a full-wave rectified signal and the other half-wave. Prior to rectification a gain of up to  $\pm 24\text{dB}$  can be applied, with a separate gain setting for each of the two outputs.

This rectifier differs from the traditional diode circuit in that it includes a bias control. This is not a bias to the input or output signal but to the cutoff voltage of the rectifier's virtual diodes. Thus, rather than the rectification pivoting around 0V it can be set anywhere in the range  $\pm 5\text{V}$ . This bias value specifies the minimum value the amplified input can reach before the rectification sets in.

Each output also provides a phase invert button which inverts the output, not around 0V but around the bias voltage.

## The Interface

