RS420

OCTAVE CONTROLLER

In the early days of modular synthesis, signal generation was undertaken not by single modules, but by oscillators and their associated controllers. The most famous examples of these are the Moog 901B Oscillator and 901A Oscillator Controller, and the later Moog 921B Oscillator and 921A Oscillator Controller. At the start of the 1970s, manufacturers combined the functions of waveform generation and providing the control that makes the sound jump through the hoops you desire, and 'integrated' oscillators became the norm. Nonetheless, there are still times when you might want to control multiple oscillators using disparate CVs, and many occasions when you might wish to re-tune or transpose multiple oscillators in live performance, whether you are playing them from a keyboard or controlling them using a sequencer. The Oscillator Controller is the module that allows you to do so.

IN USE

You can use the RS420 is two ways:

* as an intermediate stage between a keyboard or sequencer and up to three oscillators, allowing you to modulate the audio output, to switch instantly between three master octaves and four offset octaves, and to transpose sequences;

* as a means of creating new CVs. Examples of this include doubling and/or halving the speeds of LFO modulations to create sync'd modulations within the Integrator.

INPUTS

You may apply independent CVs to the CV1 and CV2 inputs. These are summed within the RS420. One obvious use for the second input is to create vibrato by applying a 1V/Oct keyboard CV to CV1-IN and the attenuated output from an LFO to CV2-IN. Another is to transpose sequences playing through the CV1-IN input by applying a suitable CV to CV2-IN.
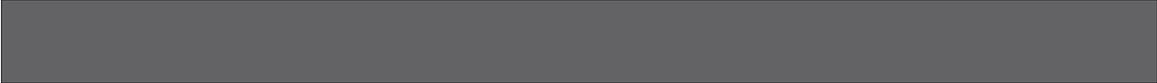
FINE TUNE

Fine-tunes the CV to the desired pitch. The range is somewhat in excess of ±1V (greater than ±12 semitones).

SLEW

The slew circuit acts upon the outputs. You can use it to slew the octave changes applied using the panel controls as well as the changes in input CVs. The maximum slew time is of the order 5s.

OCTAVE SWITCH

A global switch that shifts all three CV outputs by precisely ±1V (i.e. ±1 octave).

CV2 & CV3 OCTAVE

Independent selectors shift CV2 and CV3 by 0V, ±1V or ±2V, as desired (i.e. -2 octaves, -1 octave, unshifted, +1 octave, +2 octaves).

Inputs and Outputs

The RS420 offers two 1V/Oct CV inputs and three CV outputs.

CV1-IN, CV2-IN

Accept CVs in the range ±10V.

CV1-OUT, CV2-OUT, CV3-OUT

Output three CVs in the range ±10V.