

# Woldemar Oscillator quick manual

Version 0.6.1

## Note pitch CV

Exponential frequency control for keyboard / sequencer etc. Both inputs are summed - e.g. for transpose a sequencer out via keyboard etc.

## FM CV

Linear frequency-modulation CV input. Can be attenuated from -1 to +1.

## PW CV

Pulse-Width modulation (SAW, TRI)  
If the CV input is not connected the knob acts as static adjustment of the pulse-width, otherwise the input CV is attenuated from -1 to +1.

## Waveform output

All waveform output levels will be around -5V to +5V - except for PW modulated signals, they may be lower.



## Fine-tune:

-12 / +12 semitones  
(One octave up and down)

## Octave switch

If set to 'LOW' the VCO runs in LFO mode (see below), from approx. 0.001 Hz up-to 25 Hz.  
In LFO mode the LCD (Hertz-meter) and indicator LED is turned on.

## Waveform Mixer

All waveforms could be mixed to a independent out port.  
The gain attenuation reaches from -1 to +1 - negative values results in an inverted wave.

## Noise

When operating in LOW mode, the noise generator turns into a S&H - it samples the noise and the hold operates at the LFOs frequency.

## LFO mode LCD

A 3-Digit Hertz-meter shows the exact frequency the LFO is currently running at.



## LFO mode LED

Visual indicator of the LFOs frequency.