

X-4046 VCO Spec Sheet

Tuning

CV (Volts)	Predicted (Hz)	Actual (Hz)	Error in %	Error in Cents
0	20	19.5	-2.50%	-42.04
1	40	39.75	-0.63%	-10.51
2	80	80	0.00%	0
3	160	160	0.00%	0
4	320	320	0.00%	0
5	640	640	0.00%	0
6	1280	1281	0.08%	1.31
7	2560	2564	0.16%	2.63
8	5120	5122	0.04%	0.66
9	10240	10238	-0.02%	-0.33
Semitone	1.06			
%Change	5.95%			
Cent	0.06%			

Note: Fractional frequencies were estimated by counting, to the nearest quarter.

Output Waveforms

	Volts p-p	Condition
Sine	9.2	R16/R17 = 10k
	10.4	R16/R17 = 11k
Triangle	9.8	R34 = 120k
Sawtooth	10.6	
Pulse	9.6	
Rampoid	9.8	0%
	10	50%
	10.6	100%

A pip is visually obvious on the triangle wave, but not sonically objectionable. The pip is less pronounced on the sine wave.

All waveforms are well centered.

PWM spans 0% to 100%.

Hard sync performs well. Use a pulse input.

Max Ic	1.059 mA
Min Freq	0.17 Hz
Max Freq	34 kHz (sawtooth)
	17 kHz (all other waveforms)