μ**LFO**

3340·A

Description

μLFO$_{3340\cdot A}$ is a voltage controlled low frequency oscillator. The micromodule is based on AS3340 integrared circuit. Its typical use is for generating periodical control signal for modulating e.g. VCO pitch, VCF cut-off frequency, or VCA gain.

Features

- 4 independently accessible waveforms: triangle, saw, inverted saw, pulse
- voltage controlled PWM
- 3 rate control inputs with different sensivity
- 5Vpp output signal with adjustable DC shift
- control voltage range normalized to $0V \div +5V$
- LED indicator
- $+12V$, $-12V$ power supply
- reverse voltage protection

Input/Output

pin	label	description	range [V]
1	▷ RANGE	rate control input; high sensitivity	$0 \div +5$
2	▷ COARSE	rate control input; medium sensitivity	$0 \div +5$
3	▷ FINE	rate control input; low sensitivity	$0 \div +5$
4	▷ PWM	pulse width modulation control input	$0 \div +5$
5	▷ SHIFT	DC shift input	$0 \div +10$
6	◁ TRIANGLE	triangle wave output	$0 \div 5^1$
7	◁ PULSE	pulse wave output	$0 \div 5^1$
8	◁ SAW	sawtooth wave output	$0 \div 5^1$
9	◁ INV SAW	inverted sawtooth wave output	$0 \div 5^1$
14	+12V	positive power supply	
15	GND	ground	$\div$
16	-12V	negative power supply	

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[1]when ▷ SHIFT unconnected or connected to GND

Typical connections

from	⇝	attenuated	⇝	to		comment
+5V	⇝	yes	⇝	▷ RANGE		manual frequency control
+5V	⇝	yes	⇝	▷ COARSE		manual frequency control
+5V	⇝	yes	⇝	▷ FINE		manual frequency control
+5V	⇝	yes	⇝	▷ PWM		manual pulse width control
0V	⇝	no	⇝	▷ SHIFT		LFO signal range $0V \div +5V$
+5V	⇝	no	⇝	▷ SHIFT		LFO signal range $-2.5V \div +2.5V$
+10V	⇝	no	⇝	▷ SHIFT		LFO signal range $-5V \div 0V$
◁ $wave^2$	⇝	yes	⇝	μVCO	▷ 1 V/Oct	vibrato
◁ $wave^2$	⇝	yes	⇝	μVCA	▷ GAIN	tremolo
◁ $wave^2$	⇝	yes	⇝	μVCF	▷ FREQ	periodical cut-off frequency modulation

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[2]$wave$ = TRIANGLE | PULSE | SAW | INV SAW