

the source



THE SOURCE is a microprocessor-controlled, programmable monophonic synthesizer from Moog Music.

The time-tested Moog® sound is combined with the first system to truly take advantage of the computing power of a microprocessor, resulting in an instrument with these features:

A unique touch panel eliminates the need for a panelful of switches and knobs; all variable functions are handled by a master incremental controller.

Sixteen programs are stored in memory for instant access. Editing is instantaneous and always active.

A self-contained digital sequencer will store two real-time sequences of up to 88 notes each. A unique program sequencer enables automatic program changes to occur during sequencer playback.

A performance-oriented arpeggiator will accept a discrete pattern of up to 24 notes for immediate playback.

The microprocessor produces automatic triggers and digitally-generated sample & hold.

All programs, sequences, and arpeggios may be saved on a standard cassette tape for later re-use.

All these functions in a slim, walnut-trimmed case make THE SOURCE a truly beautiful "state-of-the-art" synthesizer...from Moog, the people who started it all.

SPECIFICATIONS - THE SOURCE

KEYBOARD

Description: 37 Note C to C Low note priority
Keyboard Transpose: + 1 Octave (Left hand control)
Glide Time: Linear, continuously variable from less than 2 msec to 5 sec (bottom to top of keyboard)
Sample & Hold drift: Zero (digital sample & hold)
Trigger: Single or multiple (on CV change)

MODULATION

Rate: Continuously variable from 0.25 Hz to 325 Hz
Waveshape: Triangular & square
Amount (Square wave): Oscillator, zero to 16 semitones
Filter, zero to 5 octaves

PITCH WHEEL

Range: Greater than \pm fifth

OSCILLATOR 1

Reference frequency: Low C 32' 32.7 Hz \pm 0.1 Hz
Scale factor accuracy: 0.21% from 65 Hz to 1.5 KHz
Range drift due to temp: 32°F to 100°F less than 0.02%/°C
Waveform: Sawtooth, triangular, rectangular
Pulse duty cycle: Continuously variable from 5% to 95%
Octave footages: 32', 16', 8'
Octave accuracy: 0.2%
Output level range: 80 dB

OSCILLATOR 2

Reference frequency: Low C 32' 32.7 Hz \pm 0.1 Hz
Scale factor accuracy: 0.21% from 65 Hz to 1.5 KHz
Range drift due to temp: 32°F to 100°F less than 0.02%/°C
Waveform: Sawtooth, triangular, rectangular
Pulse duty cycle: Continuously variable from 5% to 95%
Octave footages: 32', 16', 8'
Octave accuracy: 0.2%
Interval range: 2.1 Octaves
Interval cal range: \pm 3%
Output level range: 80 dB
Oscillators will not lock when not in sync

OSCILLATOR SYNCHRONIZATION

In the sync mode, Oscillator 2's sawtooth wave can be reset by itself or by the reset pulse from Oscillator 1. This locks the fundamental frequency of Oscillator 2 to Oscillator 1 generating a complex waveform. When in the sync mode, the pitch wheel is rerouted only to Oscillator 2.

NOISE SOURCE

Type: Digital pseudorandom pink noise
Output Level Range: 80 dB

VOLTAGE CONTROLLED FILTER

Type: Low pass 24 dB/octave cutoff slope, with variable height resonant peak at cutoff frequency.
Range of cutoff: 30 Hz to 25 KHz
Keyboard tracking: Selectable zero, half, full
Keyboard tracking accuracy: Full mode, 0.5% (30 Hz to 20 KHz)
Sweep of cutoff frequency by contour generator: 10 octaves

CONTOUR GENERATORS

Number: 2
Type: Microprocessor controlled 4 part ADSR, retriggerable
Range of attack, decay, release times: 1 msec to 10 sec.
Range of sustain level: 0 to 100% of peak contour

VOLTAGE CONTROLLED AMPLIFIER

Audio output level: 0 dBm
Dynamic range: 80 dB
Output offset: Less than 100 mV

REAR PANEL

Fine tune: \pm 3 semitones
KB control voltage in: 1 V/octave \pm 2%
Input impedance = 50 K ohm
KB control voltage out: 1 V/octave \pm 2%
Output impedance = 1 K ohm
S-Trigger in: Single or multiple trigger, switch closure to ground triggers contour generators, input impedance greater than 1 K ohm
S-Trigger out: Single or multiple trigger (determined by front panel control). Trigger on is switch closure to ground
Cassette I/O: Tape interface with transport on/off control
Audio Output: 0 dBm, Output impedance = 600 ohm

BURN IN (AGING)

Before final calibration, units are burned in for 72 hours at ambient of approximately 72°F.

POWER REQUIREMENTS

Operating voltage range
Domestic: 95 to 130 VAC 60 Hz
Export: 200 to 260 VAC 50 Hz
Power consumption: Less than 30 watts

DIMENSIONS & WEIGHT

Overall size: 26 3/8" wide, 12 1/2" deep, 3" high
(67 cm wide, 31.75 cm deep, 7.62 cm high)
Net weight: 22 lbs. (48.51 kg)