micromoog SYNTHESIZER

SMALL WORLD

The MICROMOOG is a world of sound in a nutshell

Introducing the most portable *and* affordable Moog™ synthesizer ever—the MICROMOOG. It's the size of a ballpark vendor's tray so you can carry it around the stage while you play. And, thanks to its modular design, you can use it as the basic building block. You can even couple as many MICROMOOGS together as you like with their controls interrelated with each other.

The patented Moog filter gives you the famous fat Moog sound. There's a ribbon for pitch bending plus sample and hold. And the instrument is variable, rather than preset, to open up unlimited sound possibilities to you.

All this, yet the MICROMOOG costs less than a lot of keyboard instruments with limited sounds. So, if you're thinking of making a lot of sounds, think small. Think MICROMOOG!

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FEATURES

Temperature regulated ultra stable audio oscillator

Separate modulating oscillator

Filter can produce pure sine wave

Controlled filter emphasis to prevent accidental oscillation

Continuously variable voltage controlled waveshape

One to two suboctave doubling—blendable

Octave "click" switching—32', 16', 8', 4', 2'

Frequency knob can sweep oscillator pitch continuously over an 8 octave range Fine tune control

Patented Moog™ voltage controlled low pass filter, 24 dB per octave

Reversible filter contours to create a whole new series of sounds

Separate contour generators for VCF and VCA

Ribbon "return to center" pitch bender—zero inertia

Sample & Hold

Modulation wheel controls amount of vibrato, trills, wide range pitch bending, wah-wah, sample and hold effects, dynamic wave shaping

Rapid filter modulation for ring modulator effects

"Open system"—Input/Output capabilities make it compatible with other Moog synthesizers and accessories as well as guitar and other instruments

Glide

Noise generator

Single master PC board for ease of maintenance

850509 RD © 1975

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MICROMOOG SPECIFICATIONS

TONE OSCILLATOR

FREQUENCY RANGE: 30 to 5,000 Hz (cycles per second) using panel controls alone. 0.1 Hz to 20 KHz using external voltage control.

RANGE SWITCH: Transposes oscillator to 32', 16', 8', 4', 2', and WIDE ranges. Step accuracy better than 99.75%. WIDE range activates 8 octave Frequency control.

OSCILLATOR STABILITY: Short term range drift after 5 minutes warmup less than 0.1% (1 Hz to 2' low C = 1,000 Hz). Long term scale drift less than 0.05%. Totally temperature insensitive.

SCALE ACCURACY: Better than 99.95%.

PRIMARY OSCILLATOR WAVE FORM: Voltage controlled and continuously variable from sawtooth through square to narrow rectangular.

OSCILLATOR DOUBLING: Continuously variable mix with primary waveform of square wave one octave or two octaves below primary pitch.

NOISE SOURCE

Pink noise random waveform as "hiss" audio source.

FILTER

CHARACTERISTIC: Extremely stable lowpass filter with variable—height resonant peak at cutoff frequency and 24 dB/octave slope.

RANGE OF CUTOFF: 1 Hz to 40 KHz, voltage controlled.

TRACKING: Half-tracking or full tracking of oscillator.

OSCILLATION: In "tone" mode filter becomes a pure sinewave generator with at least a 50 Hz to 5 KHz range.

ACCURACY OF OSCILLATION: Better than 99% 16' Lo F to 4' Hi C. Synchronizable with tone oscillator to achieve same accuracy and stability characteristics as tone oscillator.

CONTOUR: Filter contour generator feeds through reversible attenuator for positive or negative sweeps up to 5 octaves.

FREQ. MOD. BY OSC: Injects tone oscillator into control input of filter to yield tone color and ring modulation effects.

LOUDNESS CONTOUR

DYNAMIC RANGE: 80 dB Voltage Controlled Amplifier (VCA).

CONTOUR GENERATORS

NUMBER: 2 (one for filter VCF and for articulator VCA).

RANGE OF ATTACK AND RELEASE TIMES: 1 millisecond to 10 seconds.

SUSTAIN LEVEL: Filter and loudness independently selectable for full or zero sustain.

BYPASS: Holds VCA fully on all the time.

CONTROLLERS

KEYBOARD FUNCTION: Controls oscillator pitch and filter cutoff frequency. Also triggers the contour generators when single key is depressed.

KEYBOARD DESCRIPTION: 32 note F to C organ keyboard. Lowest C in 8' range sounds middle C—261 Hz. Low note priority.

GLIDE TIME: Keyboard portamento adjustable from 1 millisecond to 5 seconds.

RIBBON: Sweeps tone oscillator pitch up or down from center deadband. Automatic return to center when released.

MODULATION

RATE: Sets speed of modulation oscillator from 0.3 Hz to 30 Hz.

MODULATION OSCILLATOR: Produces a square wave (50% duty cycle) or a triangular wave. Also triggers sample and hold. May trigger, contour generators.

SOURCE SWITCH: Determines source of modulation signal.

ROUTING SWITCH: Determines destination of modulation signal.

MOD. AMOUNT WHEEL: A playing control that varies the amount of modulation injected into the destination.

SAMPLE & HOLD

FUNCTION: Samples noise source at rate set by modulation oscillator to yield randomly changing control steps that occur at a regular tempo.

S & H AUTO: Modulation oscillator triggers contours when control step occurs. Trigger duty cycle = 50%.

S & H KBD: Sampling rate still set by mod. osc. but keyboard triggers contours.

REAR PANEL

LO AUDIO OUTPUT: −10 dBM max level at 1K output impedance.

HI AUDIO OUTPUT: +12 dBM max level at 1.5K output impedance. Will drive headphones.

S-TRIG OUTPUT: Output trigger occurs whenever contour generators are triggered. Compatible with all Moog synthesizers and accessories.

KBD. OUTPUT: Keyboard voltage (with glide) fully compatible with all Moog synthesizers and accessories. Nominal scaling is one volt/octave with Le F = 0 volts.

FILTER INPUT: Allows external voltage control of filter. Scaling is 0.95 volts/octave. Input impedance = 100K.

OSCILLATOR INPUT: Allows external voltage control of filter. Scaling is 0.95 volts/octave. Input impedance = 100K.

S-TRIG INPUT: Switch closure triggers contour generators. Internal circuit fully removes switch "bounce" Input impedance = 100K.

ACCESSORY POWER: Supplies ±15 volts regulated D.C. power for all standard Moog accessories.

AUDIO INPUT: Allows external sound source to be processed through synthesizer. 100 mV RMS input required for full drive. Input impedance = 4.7K.

MODULATION: This input/output jack allows an external switch to turn modulation on and off, or an external pedal to control amount of modulation. May also be used to route modulation signal to external equipment or feed in modulation signal from external equipment.

POWER REQUIREMENTS

90—130 VAC or 180—260 VAC.
50/60 Hz. 5 watts.

DIMENSIONS AND WEIGHT

OVERALL SIZE: 24" wide x 15" deep x 5½" high.

NET WEIGHT: 20 lbs.

moog SYNTHESIZERS
7373 N. Cicero Ave.
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Another Quality Product from Norlin
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