For The Performer...

A UNIQUE CREATIVE INSTRUMENT!

Brutal, cassic, volcanic – arousing and exciting. Crisp, powerful, thrilling, and entrancing, the Moog synthesizer is a true Moog synthesizer which opens exciting new dimensions of expression to the creative professional.

The MINIMOOG is a well-bred performer. Precisely constructed, yet sensitive and responsive. Conveniently compact, yet it produces a wide range of interesting sounds. It's easy to create many of the sounds that are made famous by the large Moog synthesizers.

The MINIMOOG contains all basic synthesizer functions, yet accepts a full range of standard and custom accessories. Controls are precisely calibrated, smooth-working, and conveniently located for flexibility of operation and fast, accurate setting of tone colors. All synthesizer functions are interconnected by a Thoughtful Logic Circuit.

Locally located switches for rapid, patchcordless programming. Left hand controllers extend traditional keyboard techniques to permit expressive bending and modulating of texture as well as pitch.

The MINIMOOG looks good and is built with uncompromising quality expected in an instrument bearing the Moog name. Plug-in-board circuitry permits fast and easy servicing, if necessary—even on location—minimizing down time. External control jacks increase the MINIMOOG's versatility for use with a wide range of accessories.

The MINIMOOG meets the exciting demands of creative professional users in all areas of musical application—from the traditional to the avant-garde. With it, the whole range of contemporary music can be created right on the job.

The versatility of the MINIMOOG is greatly expanded by use of the available optional accessories such as a foot switch, foot pedal and XY controller. In addition, standard jacks provide for plugging in a microphone, tape recorder, or other external sound sources.

The control panel adjuts to any positions to provide the correct angle for an individual performer's situation. With the panel folded down the MINIMOOG is only 5/8" thick, permitting it to easily fit into a 5/8" case available as an optional accessory.
FEATURES:
The sound generator includes an OSCILLATOR BANK of three nearly identical oscillators, each generating six waveforms, for producing pitched tones, and a RANDOM SIGNAL SOURCE, for producing sawtooth, white and pink sound. A FIVE INPUT MIXER combines the oscillator and random signals, and also provides preamplification for signals from external sources.

There are two mixers—a wide range lowpass/resonant FILTER which emphasizes some overtones and attenuates others—and an AMPLIFIER which regulates loudness. Each modulator has its own wide-range CONTROLLER GENERATOR for shaping loudness and onset time.

The controllers include a 9-key octave KEYSWITCH with its own glide control, a PITCH BENDER WHEEL, and a MODULATION INJECTOR WHEEL with a modulation mix control. An A-440 ELECTRONIC TUNING FORK and an EARPHONE AMPLIFIER are provided for ease in tuning and for silent practicing.

All circuitry is solid state, mounted on conveniently removable printed circuit cards located immediately behind the Front Panel.

SPECIFICATIONS
SOUND SOURCES
NO. OF SOUND SOURCES: 5 (3 Oscillators, 1 Noise Source, 1 External Input/Microphone Jack).
OSCILLATOR FREQUENCY: 0.1 to 20,000 Hz. (cycles/second) in six overlapping ranges.
SHORT TERM OSCILLATOR STABILITY: ±1%. OSCILLATOR WAVEFORM OUTPUTS: Triangular, Sawtooth, Triangular-Sawtooth Mix. (1 & 2 only), Reverse Sawtooth (1c: 3 only), 3 widths of Rectangular.
NOISE SOURCE OUTPUTS: White or Pink random waveforms.
PREAMPLIFIER INPUT: 10 millivolts minimum; 2 volts max.
PREAMP INPUT IMPEDANCE: 1,000 ohms or greater.
FILTER
FILTER CHARACTERISTICS: Wide-range lowpass filter with variable-height resonant peak at cutoff frequency, and 24 effective cutoff slope.
RANGE OF CUTTOFF FREQUENCY: Continuously variable from 40 Hz to 20 kHz (9 octaves).
VOLTAGE-CONTROLLED AMPLIFIERS
NUMBER OF AMPLIFIERS: 2 (one controlled only by its Contour Generator, the other controlled by optional external controller).
DYNAMIC RANGE OF EACH AMPLIFIER: 80 dB.
CONTOUR GENERATORS
NUMBER OF CONTROLLER GENERATORS: 2 (one controlling filter through an attenuator, the other controlling the first Voltage-Controlled Amplifier).
RANGE OF ATTACK TIME: 10 milliseconds to 10 seconds.
RANGE OF DECAY TIME: 10 milliseconds to 10 seconds.
RANGE OF SUSTAIN LEVEL: 0 to 100% of contour peak.
WIDTH OF SWEEP OF FILTER BY ITS CONTROLLER GENERATOR: Continuously variable from 0 to 4 octaves.

AUDIO SIGNAL OUTPUTS
HIGH LEVEL OUTPUT: 0.3 volts typical, with 1K ohms nominal output impedance.
LOW LEVEL OUTPUT: 15 millivols typical, with 1K ohms output impedance.
HEADPHONE OUTPUT: 0.3 volts maximum, into standard 8-ohm stereo headphones.

CONTROLLERS
KEYBOARD FUNCTION: Permanently connected to (a) a center Oscillator 1 & 2, and (b) trigger Contour Generators. Keyboard may be switched to control Oscillator 3 and Filter.
DESCRIPTION OF KEYBOARD: Standard 44-key (5½-octave) organ keyboard. Only lowest key depressed has effect in controlling Oscillator and filter. Contour Generators are activated whenever a single key is depressed.
RANGE OF KEYBOARD: Continuously variable from one millisecond to one second/octave.
RANGE OF FILTER CONTROL: Continuously variable from 1 millisecond to one second/octave.
RANGE OF MODULATION INJECTOR RANGE: 0 to 1½ octaves.

CONTROL & POWER CONNECTIONS
EXTERNAL PITCH CONTROL INPUT CHARACTERISTIC: 1 volt change produces 1 octave change.
EXTERNAL FILTER CONTROLLER INPUT: 1 volt change produces 1 octaver change in cutoff frequency, ± 5%.
EXTERNAL AMPLIFIER CONTROL INPUT: Linear control voltage/gain relationship Gain range spanned by 14 volts.
EXTERNAL TRIGGER INPUT: Switch-closing activates both Contour Generators.

DIMENSIONS & WEIGHT
OVERALL SIZE (with Front Panel down): 28½" wide, 16" deep, 5½" high.
NET WEIGHT: 29 lbs.
SHIPPING WEIGHT: 45 lbs.

POWER REQUIREMENTS
110-135 volts, 60 Hz, 10 watts maximum.
Specifications subject to change.