

Korg MS-20 Mini Monophonic Analog Synthesizer

Features and Specifications

- Overseen by the engineers of the original MS-20 for a complete replication of the original analog circuitry
- 2VCO / 2VCA / 2VCF / 2EG / 1LFO Structure
- Self-oscillating high-pass/low-pass filters with distinctive distortion
- External signal processor (ESP)
- Extremely flexible patching system
 - Faithful recreation of the MS20 at 86 of the size
 - MIDI IN and USB connector
 - Replicates every detail of the original, down to the package binding and the included manual

Control Section:

- **Keyboard:** C - C 37-notes (3 octaves), mini keyboard designed specifically for the MS-20 mini
- **Voltage Controlled Oscillator 1 (VCO 1):** Scale (32', 16', 8', 4') (6 octaves, +cent, -cent), Wave form (Triangle, Sawtooth, PW-Square, White Noise) (4 modes), Pulse width adjust 1:1 - 1:infinity
- **Voltage Controlled Oscillator 2 (VCO 2):** Scale (16', 8', 4', 2') (6 octaves, +cent, -cent), Wave form (Sawtooth, Square, Pulse, Ring modulator) (4 modes), Pitch (± 1 octave)
- **VCO Master control: Master tune (+/- 100cent):** Portamento (max. 10sec), Frequency modulation intensity by MG/T.EXT (-5V - +5V), Frequency modulation intensity by EG1/EXT (-5V - 0V)
- **VCO Mixer:** VCO 1 Level, VCO 2 Level
- **Voltage Controlled High Pass Filter (VCF HPF):** Cutoff frequency (50Hz - 15,000Hz), Peak (flat - self OSC), Cutoff frequency modulation intensity by MG/T.EXT (-5V - +5V), Cutoff frequency modulation intensity by EG2/EXT (-5V - +5V)
- **Voltage Controlled Low Pass Filter (VCF LPF):** Cutoff frequency (50Hz - 15,000Hz), Peak (flat - self OSC), Cutoff frequency modulation intensity by MG/T.EXT (-5V - +5V), Cutoff frequency modulation intensity by EG2/EXT (-5V - +5V)
- **Envelope Generator 1:** Delay time (10sec), Attack time (10sec), Release time (10sec)
- **Envelope Generator 2:** Hold time (20sec), Attack time (10sec), Decay time (10sec), Sustain level (0V - 5V), Release time (10sec)
- **Modulation Generator (LFO):** Wave form (Positive Sawtooth - Triangle - Negative Sawtooth, Wide Pulse - Square - Narrow Pulse), Frequency (0.1Hz - 20Hz)
- **Manual controller:** Control wheel (centre click), Momentary switch -->GND
- **Power switch and Volume:** Volume
- **Indicator:** LED (KBD trigger, Modulation Generator rate, Power ON)

External Signal Processor

- **Control section:** Input signal level, Low cut frequency (50Hz - 2,500Hz), High cut frequency (100Hz - 5,000Hz), CV adjust, Threshold level
- **Input and Output:** Signal In, Amplifier Out, Band pass filter Out, CV Out (0 - +8.4V), ENV Out (0 - +5V), Trig Out (+5V-->GND)
- **Indicator (LED):** Peak indicator, Trigger indicator

Patch Panel:

- **Keyboard:** Keyboard control voltage output (Exponential) (0 - +8V), Keyboard trigger output (+5V-->GND), VCO-1 + VCO-2 control voltage input (Linear response)(0 - +8V), VCO-2 control voltage input (Linear response) (0 - +8V)
 - **VCO:** VCO-1 + VCO-2 external frequency control input (OCT/V) (-5V - +5V)
 - **VCF:** External signal input (3Vp-p max.), External High pass filter cutoff frequency control input (2OCT/V) (-5V - +5V), External Low pass filter cutoff frequency control input (2OCT/V) (-5V - +5V)
 - **VCO + VCF:** Total external modulation input (T.EXT)(-5V - +5V)
 - **VCA:** External initial gain control input (0 - +5V)
 - **EG:** EG 1 envelope signal normal output (-5V - 0V), EG 1 envelope signal reverse output (+5V - 0V), EG 1 + EG 2 trigger input (-->GND), EG 1 trigger input (-->GND), EG 2 envelope signal reverse output (+5V - 0V)
 - **MG:** Triangle output (Positive Sawtooth - Triangle - Negative Sawtooth) (5Vp-p), Rectangle output (Wide Pulse - Square - Narrow Pulse)(0 - +5V)
-
- **Noise Generator:** Pink noise output (5Vp-p), White noise output (5Vp-p)
 - **Sample and Hold:** Clock trigger input (-->GND), Sample signal input (5Vp-p max.), S/H output (5Vp-p max.)
 - **Modulation VCA:** Control voltage input (0 - +5V), Signal input (-5V - +5V), Signal output (-5V - +5V)
 - **Manual controller:** Control wheel output (-5V<--0V-->+5V), Momentary switch output (-->GND)
 - **Signal out:** Signal output (mono 1/8" mini phone jack, 2Vp-p output impedance 3.5k)
 - **Head phones:** Head phones output (Stereo 1/8" mini phone jack, 33 ? 48mW)
 - **USB:** Type B, USB-MIDI Input/Output
 - **MIDI:** MIDI Input
 - **Power Consumption:** 9W
 - **Power Supply:** DC9V
 - **Dimensions (W x D x H):** 493 x257 x208 mm / 19.41 x 10.12 x 8.19 inches
 - **Weight:** 4.8 kg / 10.58 lbs.
 - **Accessories:** AC adaptor (9V/1.7A), Patch Cord x 10

