MICROCON
by technosaurus

(Version 2.0)

monophonic analog synthesizer

swiss premium quality

OWNERS MANUAL

Produced and developed by **technosaurus**, 3400 Burgdorf, Switzerland
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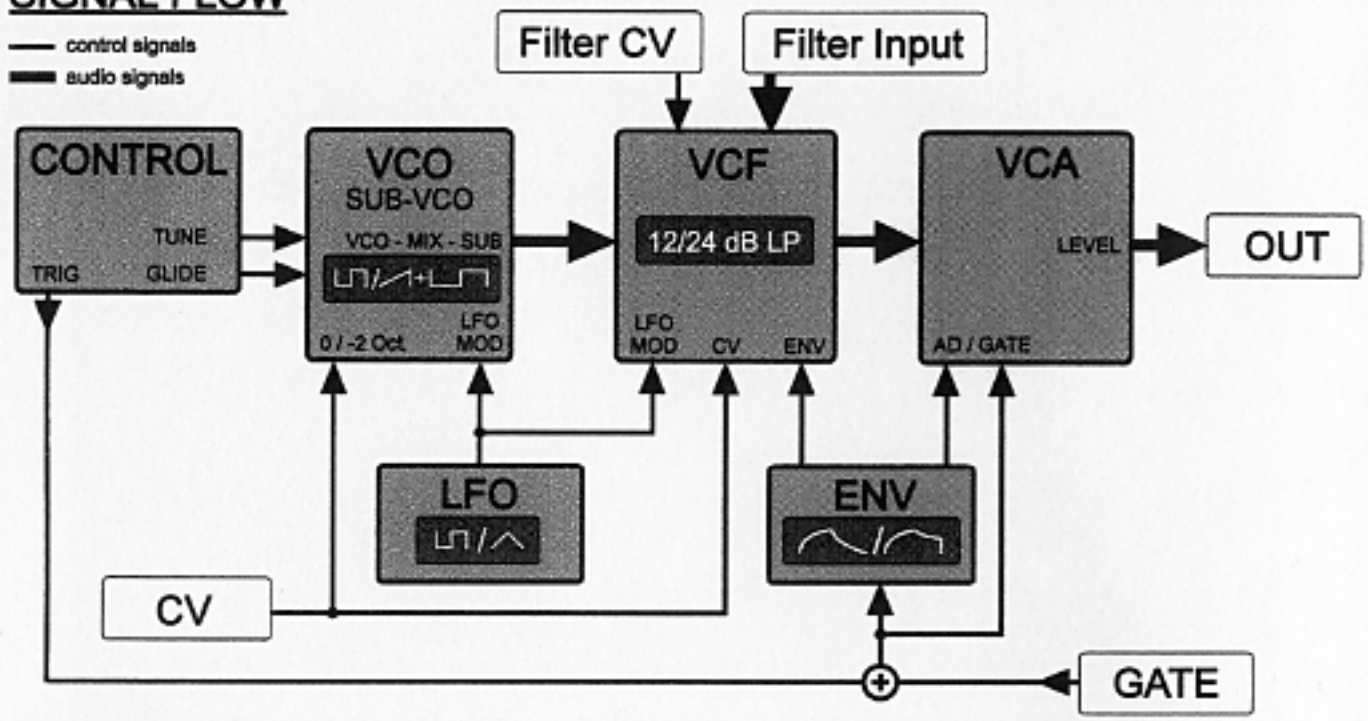
INTRO

We congratulate you for purchasing this **real** analog synthesizer. The **MICROCON**s are hand made in Switzerland. The most important sections are built out of single, non-integrated components, i.e. **discrete**. The new series 2.0 **MICROCON** serves as both analog synthesizer and filterbox for external audio signals!

SIGNAL FLOW



FUNCTIONS

CONTROL

GLIDE This knob determines the time in which the VCO glides from one note to the next. When set to the minimum, the tone jumps to the following note without gliding.

TRIG Button for manually triggering the Envelope Generator (ENV) and therefore the actual sound. When pressed continuously, it prevents the Envelope from starting with a new Gate signal. So this button can produce a "legato"-play.

TUNE Master Tune of the **MICROCON**, to adjust its pitch to other instruments.

VCO

Voltage controlled oscillator. The actual sound source of the synthesizer.
One Volt fed at the CV input changes the pitch by one octave.
The sound sources can also be switched off. See chapter Advanced Connections.

OCTAVE Switches the master tune down by two octaves.

SUB-MIX-VCO In addition to the VCO, the **MICROCON** offers another sound source:the Sub-Oscillator (SUB). It is a rectangular wave, one octave under the VCO's pitch. Here a mix of both waves can be regulated: Pure SUB (left); Combination SUB/VCO (middle); Pure VCO (right).

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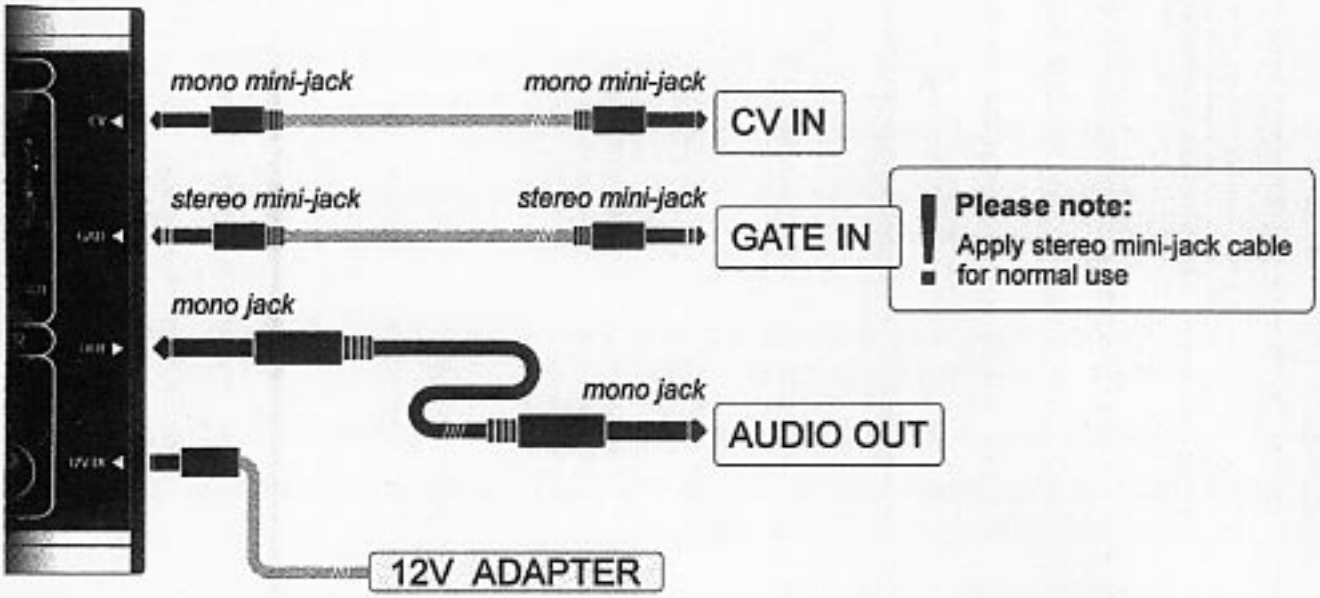
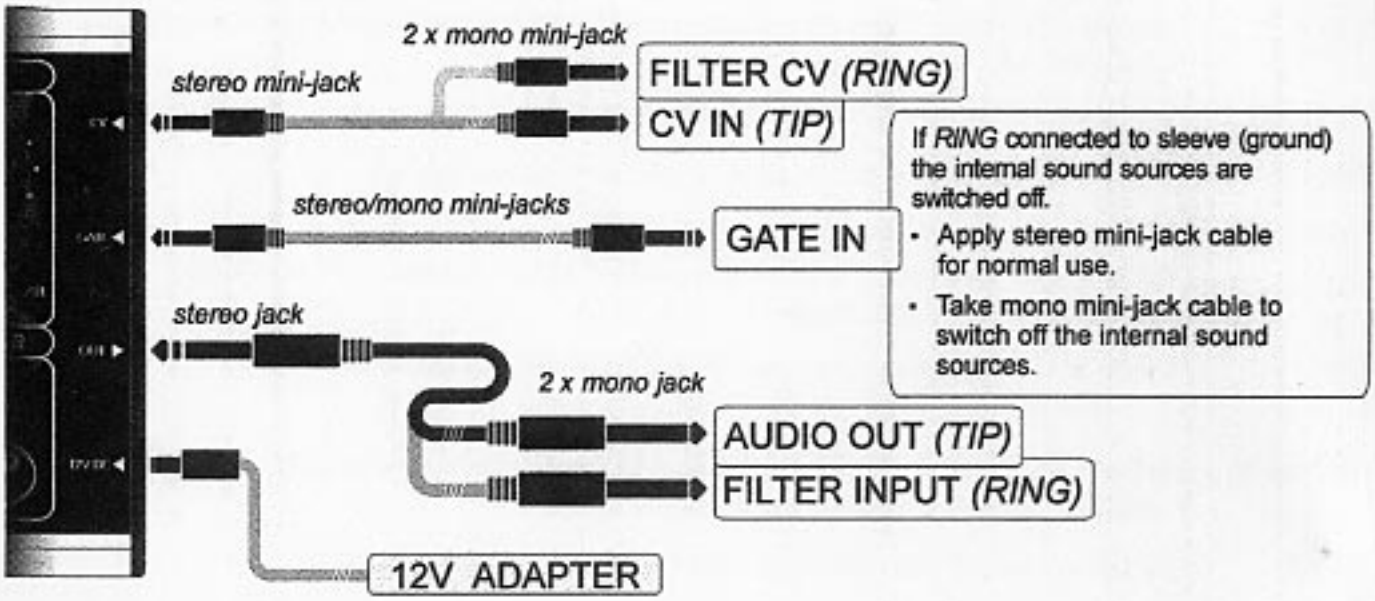
WAVES	Your choice of the VCO-waveform: rectangular ⊓ or sawtooth ◿
LFO MOD	Sets the amount of LFO-modulation for both the VCO and the SUB-Oscillator.
LFO	Low Frequency Oscillator. Can modulate the cutoff-frequency or the pitch.
WAVES	One of the two waveforms, rectangular ⊓ or triangle ∧ can be selected.
SPEED	Determines the frequency of the LFO. It ranges from long waves through to frequencies in the audio range.
ENV	Envelope Generator, responsible for the lapse of the sound. In order to modulate the volume, the switch in the VCA section should be in ON position.
ATTACK	Length of the attack time after key depression or Gate signal input.
RELEASE	Switches the release time ON or OFF. The time is the same as the adjusted decay time and starts when the key is released.
DECAY	Decay time while key depressed.
VCF	Voltage Controlled Filter. This section of the **MICROCON** has the greatest impact on the sound.
CUTOFF	Determines the border frequency, above which higher frequencies are damped.
RESONANCE	Regulates the degree of amplification at the cutoff frequency.
MODE	Choose the slope with which the frequencies above the cutoff frequency are damped: 12 dB/Octave, the rather open and soft character or 24 dB/Octave, the variant with more pressure.
CV	When set in the ON position, the VCF is modulated by the CV: The filter opens with increasing pitch.
LFO MOD	Adjusts the amount of LFO-modulation for the filter cutoff frequency. Wah-wah-effects are easy to realize.
ENV	Sets the amount, with which the Envelope modulates the cutoff.
VCA	Voltage Controlled Amplifier. Last section in the signal path.
LEVEL	Determines the volume of the audio signal.
MODE	This switch defines whether the Envelope (AD) or the connected Gate-signal (GATE) modulates the volume.
POWER	The shining of the diode (LED) confirms that the **MICROCON** is switched on.

CONNECTIONS

Basic Connections



Advanced Connections



SPEZIFICATIONS

TUNE 440 Hz in mid position
+/- 5 halftones

VCO 1V/Octave
CV= 0 V, MIX at SUB,
OCTAVE at -2 : approx. 16 Hz
CV= + 5 V, MIX at VCO,
OCTAVE at 0 : approx. 4'200 Hz

VCF 12 or 24 dB/Octave Lowpass-Filter

VCA Typ. output voltage + 1,7 Vpp (⊔⊓)

POWER 12-15 V DC, 38 mA (+/- 5 mA)

DIMENSIONS 206x103x53 mm **WEIGHT** 550 g