# ƎNSSLINE

## www.acidlab.de

MIDI IN   MIDI THRU   FM IN   AUDIO IN   CV IN   GATE IN   ACCENT IN   HEADPHONE   OUTPUT   14VAC   ON

LEARN

NOISE  SUB OCT

1    1+2
VCO MOD          MIX

30M3N55
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ON
KYBD TRACK

ON
VCA GATE

MIX
SYNC
RING
OFF

TUNE          OSC MODE          NOISE/
SUB OCT

ON
KYBD TRACK

CUTOFF          RESONANCE          ENV MOD

ACCENT

DETUNE          SWEEP MOD          LFO MOD

ON
KYBD TRIG

LFO MOD

VOLUME

RND
S/H

SWEEP SPEED          LFO MODE

LFO FREQ

RND
S/H

LFO MODE          FILTER FM          VCF DECAY          VCA DECAY
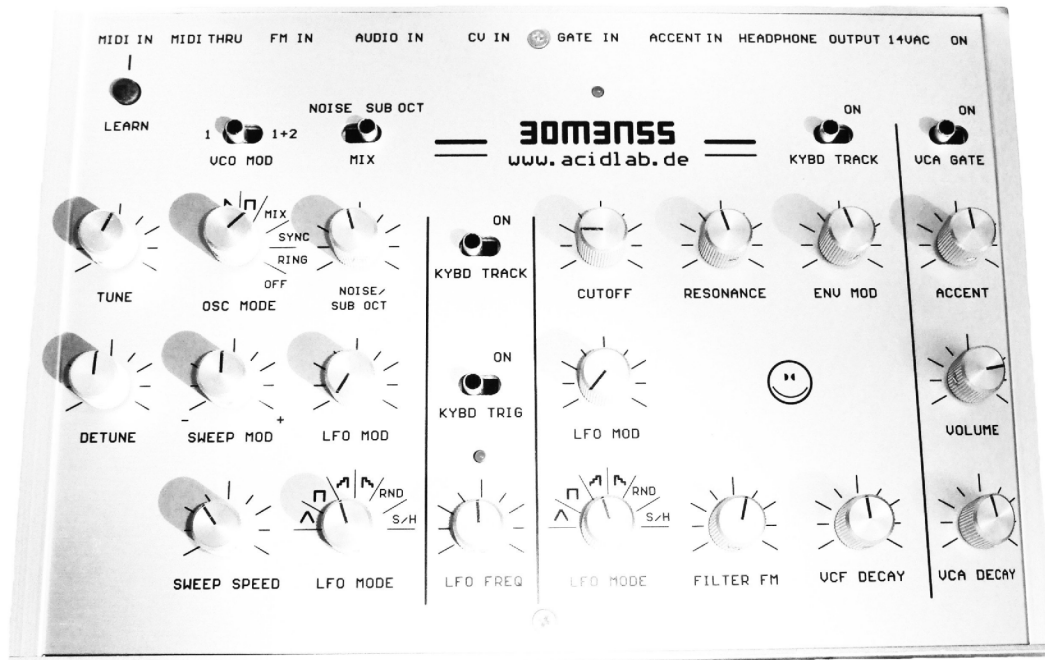
Bombass is a monophonic, analogue synthesizer.

The schematics of the VCF, VCA and the envelops are similar to the TB-303, with a lot of new features.

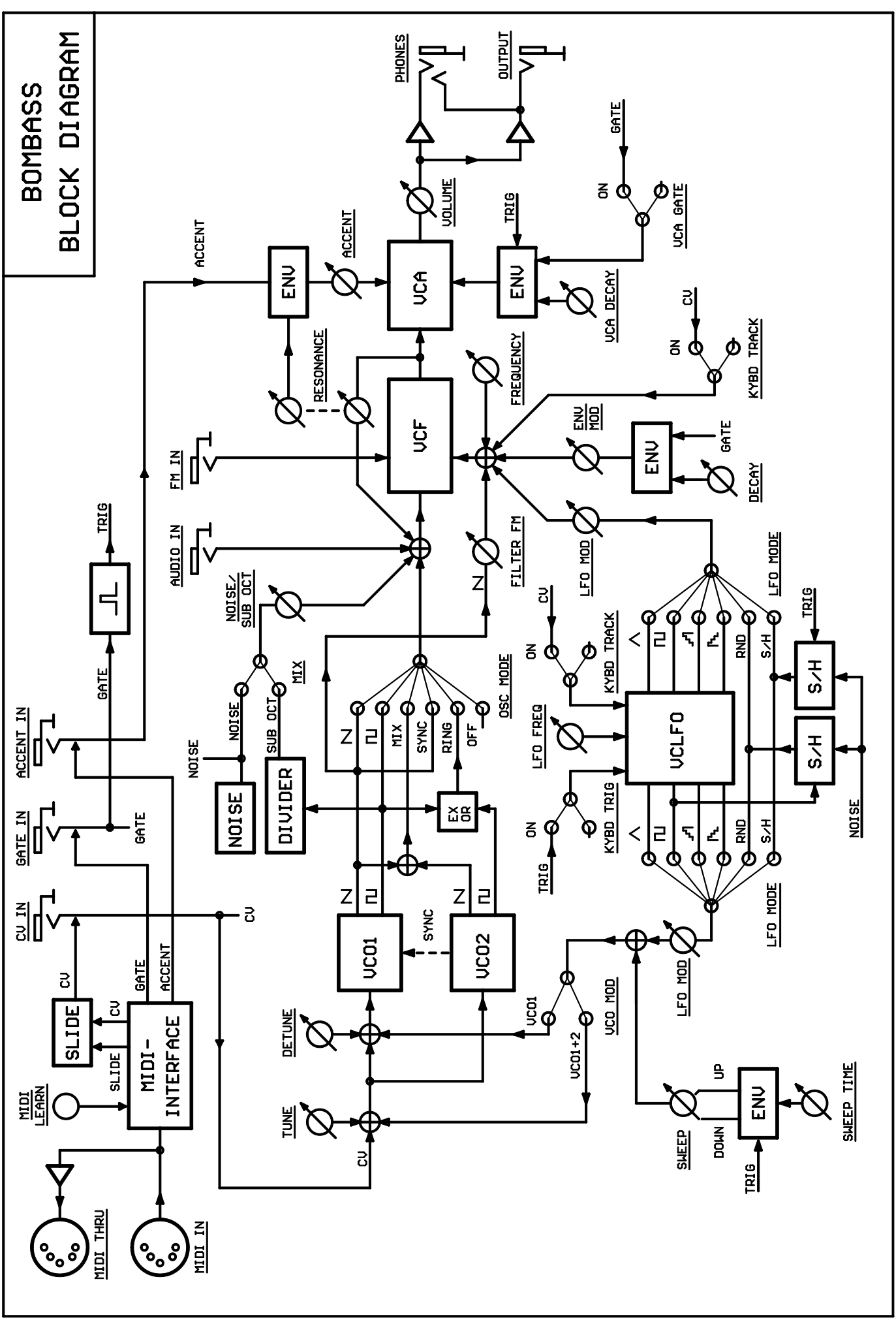With Midi, the pitch, length, slide and accent are controlled.

It si also possible to controll the bombass with the inputs CV In, Gate In and Accent In from the sequencer ot the Bassline. The Bombass works then as the synthesizer-section of the Bassline, with much more sound variations, than known from TB-303 modifications.

Everything, from abstract filter-sweeps to percussion-sounds is possible.

In comparision to the Bassline or the TB-303, the resonance range is extended, that the filter can be played without the VCO.
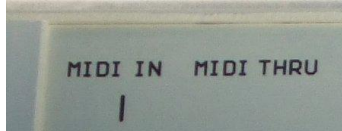

**To get an idea about the possibilities of the sound-generation of the Bombass, it is best, to take a look on the block-diagram!**

BOMBASS
BLOCK DIAGRAM

PHONES
OUTPUT

GATE

ON
VCA GATE

VOLUME

ACCENT

TRIG

ACCENT

VCA

ENV

ENV

VCA DECAY

CV

ON
KYBD TRACK

RESONANCE

FREQUENCY

VCF

ENV
MOD

ENV

GATE

DECAY

FM IN

AUDIO IN

FILTER FM

LFO MOD

TRIG

NOISE/
SUB OCT

CV

ON
KYBD TRACK

LFO MODE

GATE

NOISE

NOISE

SUB OCT

MIX

N

MIX

SYNC

RING

OFF

OSC MODE

EX
OR

LFO FREQ

VCLFO

TRIG

S/H

S/H

KYBD TRIG

TRIG

LFO MODE

NOISE

ACCENT IN

GATE IN

CV IN

TRIG

GATE

GATE

CV

N

N

VCO1

VCO2

SYNC

DETUNE

TUNE

VCO1

VCO1+2

VCO MOD

LFO MOD

LFO MODE

MIDI
LEARN

SLIDE

MIDI-
INTERFACE

CV

CV

GATE

ACCENT

SLIDE

CV

SWEEP

UP

DOWN

ENV

SWEEP TIME

TRIG

MIDI THRU

MIDI IN

ON
TRIG

KYBD TRACK

RND

S/H

RND

S/H

## Midi-Interface

### Midi connection

MIDI IN   MIDI THRU

Bombass must be connected with a Midi-cable on its Midi In, to the Midi Out of the Midi-master (Midi-sequencer, laptop, …).

Midi Thru gives the Midi-informations of the Midi-master to further Midi-slaves.

### Set the Midi-channel

LEARN

Push the Midi-Learn buttom for at least two seconds, then the LED on the top flashs.

The next received Midi-note defines the Midi-channel. To change the Midi-channel, the Midi-lLearn buttom must be pushed again.

### Note length - Gate

The Midi-note on/off`s received by the Midi-interface are converted to a gate-signal.

Tis is indicated by the LED on the top.

Velocity values of `0´ are equal to a note-off and reset the gate-signal.

A Midi-stop is equal to an `all-notes-off´, and stops all notes.

### Pitch - CV

The Midi-information of the pitch is converted to a controll-voltage CV (0-5 Volt; `C´=65,4 Hz).

**Slide**

When a second Midi-note is received, while the first is playing, the Slide-function is activated.

The pitch changes to the new pitch of the second note.

**Accent**

Velocity values higher than 99 activate the Accent.

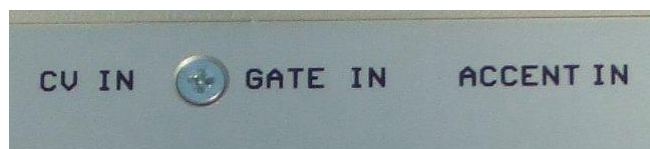The Accent is finished with the Midi-note off.

## Inputs

**Audio In**

Audio in (6.3 mm, mono) is an audio input, that is mixed to the audio signal path before the filter.

**FM In**

FM in is an input (3.5 mm of mono) to modulates the cutoff frequency of the filter.

The FM input is suitable, to modulate the filter with audio signals.

**CV-, Gate- und Accent-Inputs:**



With the CV In, Gate In and Accent In (3,5 mm mono), it is possible to controll the Bombass with a sequencer of the Bassline, a TB-303 or any other sequencer that has CV/Gate Out.

The internal connections between the Midi-interface and the synthesizer are opened, when these inputs are connected.

**CV In**

The CV In converts 1V/octave to the pitch.

**Gate In**

The Gate In needs a 5-12 Volt signal to controll the note-length.

**Accent In**

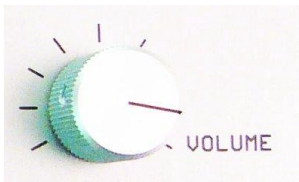The Accent In needs a 5-12 Volt signal to controll the accent-length.

The Accent In is normally controlled with the Accent Out of a Bassline, to play its lines, with the extended sound variations of the Bombass.

## Outputs

**Audio Outputs:**

Output is the main output (6,3 mm of mono), to connect a mixer. Headphones is a headphone output (3.5 mm stereo).

Both Outputs are controlled with volume.



**The produced bass frequencies are a large load for following amplifiers and loudspeakers.**

**Without protection they can take damage!**

**Voltage Supply**

**The bassline can be operated only with the provided AC power plug (14VAC/300mA).**

**Do not use other power plug!**

The bassline has an on/off switch on the right back panel.

Spare power plugs can bought at acidlab, or directly at **Conrad** electronics under the part number: **510003-12** .

In the USA or at 115VAC nets, you need the power plug of **mouser.com** with the part number: **507-XT1620** .

**Warranty**

The manufacturer grants a warranty of two years starting from the purchase date on the product, in accordance with the condition described here. If defects are founded within this time, then these will be repaired. Potentiometers, switches and sockets apply with this product are excluded from this regulation. The decision over the warranty claim meets the manufacturer. When determined foreign  modifications or mechanical damages any warranty claim expires. Products without warranty authorization are liable to pay the costs repaired. In order to clarify the warranty claim, the manufacturer is to be contacted in each case before sending back. Except the manufacturer, no third is justified to assure or implement guaranteeings. Within the warranty term the warranty is transferable to further buyers. Further requirements because of consequential damages are impossible.

*acidlab*

*Dipl. Ing. (FH) Klaus Süßmuth*

*e-mail: bassline@acidlab.de*

*web:   www.acidlab.de*