

## General

The DRUM-02 module revives the classic percussion sounds of the MFB-501 drum-machine. The sounds Tom Tom, Low Bongo, High Bongo, Low Clave and High Clave can be individually adjusted in decay time. The typical MFB-sound derives from analogue sounding digital C-MOS gates. These units works with less distortion compared to typical op-amps and therefore sound softer.

The DRUM-02 sounds, just like a lot of electronic devices made in the late seventies, pretty special and does only slightly resemble its acoustic counterparts. Instead the sounds offer a unique character as other beloved beat boxes like Roland CR78, Korg Minipops, Hammond Autovari etc... In combination with MFB's other DRUM modules and a step-sequencer these specific sounds and groove can now be integrated into your modular system.

## Set-up

The DRUM-02 module is fully compatible to the Doepfer A-100 modular system - in size, bus-power and CV/Gate voltage. Connect the 10-pin cable to a corresponded 16-pin jack on the Doepfer mainframe bus. Supply voltage needs to be +/- 9-15 volts, 5 volt is not needed. The wattage is 40 mA, the module size 12 TE (Teileinheiten).

**ATTENTION:** Please, check for correct polarity! The colored side of the connector-cable needs to point downwards so that the cable is not twisted.

## Connections

Inputs **TT In**, **LB In**, **HB In**, **LCL In** and **HCL In** accept common trigger-signals. **TT Out**, **LB Out**, **HB Out**, **LCL Out** and **HCL Out** output the percussion sounds and are meant to be patched to a mixer or VCA. There's nothing to be said against if you want to shape the percussions with other modules first before combining into a mixer, like wave-shaper, BBD, filter or ring-modulator.

## Trigger

All percussion instruments can be individually triggered from their inputs. These don't necessarily need to be analogue or digital trigger signals of a step-sequencer. You may as well use drum pads, piezo microphones or dynamic microphones. The four Sens controls will adjust the input sensitivity individually. Dynamic triggering will not only affect the volume of the sound but also attack and decay parameters.

You may intentionally set trigger sensitivity to a "wrong" value. By doing so, it is possible to use a strong signal's positive and negative slope as trigger inputs to create "doubles" while normally only the positive slope would trigger the sound.

## Sound parameters

### Tom Tom

**TT Decay** adjusts the decay time of the Low Tom.

### Low Bongo

**LB Decay** adjusts the decay time of the Low Bongo.

### High Bongo

**HB Decay** adjusts the decay time of the High Bongo.

**Tip:** With the MFB-501, many user used the High Bongo and Low Bongo sounds as a replacement for High Tom and Mid Tom. By this, they achieved a full set of toms tuned in three steps.

### Low Clave

**LC Decay** adjusts the decay time of the Low Clave.

### High Clave

**HC Decay** adjusts the decay time of the High Clave.

**Info:** Since the MFB-501 was mainly sold in Germany, the original names for the clave sounds were H1 and H2 with "H" standing for "Holz" (the german for wood).

There is an additional trim-potentiometer for each percussion instrument on the circuit board to further increase the maximum decay time - up to self-oscillation if necessary. To access the potentiometers remove the module from the frame and use a miniature screwdriver to adjust the values through the according hole of the back panel. The factory setting is set so that maximum lengths are just below self-oscillation.



**Operating manual**

**Drum-02 Module**