General

The DRUM-08 module is based on a slightly modified circuit of the clap sound source in MFB's drum computer model 522. The sound can be manually edited in different parameters. In addition, three functions can also be controlled or modulated by CV-signals like envelopes, LFOs or step-sequencers.

Set-Up

DRUM-08 is fully compatible to Doepfer's A-100 modular system - in size, bus-power and CV/Gate voltage. Connect the 10-pin MFB-cable to a corresponded 16-pin jack on the MFB MIDI/CV circuit-board or Doepfer's mainframe bus. Supply voltage needs to be +/- 12 volts, 5-volt connections are not required. The wattage is +/- 30 mA, the module size 8 TE (Teileinheiten) = 40 mm.

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

Functions

The clap sound is triggered by the **Trigger** input. Common triggers are analogue or digital gate-signals of a step-sequencer, a MIDI-CV/Gate-converter or a square-LFO. Alternatively, drum pads, dynamic or piezo-trigger-microphones may also be used. Dynamic triggering will not only affect the sound's volume but also the attack and decay times slightly.

Sens is a trim control to adjust the input's sensitivity to the trigger-signal. The highest sensitivity allows triggering at a minimum voltage of around 0.1 volt. The input reacts to the positive slope of the signal.

Out L and **Out R** carry the audio signal. This can be routed into a mixer (e.g. DRUM-98/99), two VCAs or any other sound manipulating modules. You may also use the outputs to connect the DRUM-08 directly to your mixing console or audio-interface.

Parameters

The clap-sound is based upon a filtered noise sound source. Internal VCAs are used to separate the noise into two phases: an initial sequence of consecutive claps and a following decay stage.

The decay stage is set by the **Reverb** control. Although not a reverb but a noise-decay, this control adds a reverb-like flavor to the sound, comparable to the clap-sound in Roland's TR-808. To "disable" the reverb-effect, turn this control fully counter clockwise and you will only hear the dry clap-sounds of the initial stage. With the control turned fully clockwise, the reverb-effect will last approximately one second.

The **Claps** control sets the number of clap-repetitions during the initial sound stage. The clap count also depends on the setting of the **Space** control.

Space sets the time-distance between the individual claps. Turn counter clockwise for a larger spacing between claps. However, the bigger the distance, the less claps can be heard.

Decay controls the length of the individual claps. Not to be confused with the overall release time for the sound that is set using **Reverb**. The **Decay** control interacts with the setting for **Space** and **Claps**. Depending on the setting of these controls, the effect of **Decay** ranges from marginal to clear.

Claps, **Space** and **Decay** can also be externally controlled by their correspondent CV-inputs. Try using CV-sources like LFOs, a Theremin-controller or envelope generators. These inputs do not have attenuators. To control the amount of modulation, use external attenuators, VCAs or mixer modules between the CV-source and the inputs. Attenuators are not necessarily needed when using a step-sequencer. This is because of the possibility to set an exact CV-voltage and therefore a specified modulation amount per step.

Basis adjusts the clap sound's stereo-spreading at the stereo output. DRUM-08 generates the individual claps alternating to the left and right channel. With **Basis** set appropriately, the result is a wide stereo-stage. To keep up the effect, it is recommended to connect the DRUM-08's stereo output to a stereo input as found in MFB-mixers DRUM-98/99 or an external mixing console. With **Basis** set fully counter clockwise, the clap sound will be available as a monaural sound source at one or both outputs.

Attention: The required voltage for all CV-inputs needs to be within a range of 0 to 10 volts.

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