General

The DRUM-05 module basically derives from the snare drum circuit found in the MFB-503. It allows the same comprehensive sound editing. In addition, DRUM-05 offers CV-control over the parameters Snap, Decay, Tune and Pitch. These parameters can be controlled by sources like envelope generators, LFOs or step-sequencers.

Set-up

DRUM-05 is fully compatible to Doepfer's A-100 modular system - in size, bus-power and CV/Gate voltage. Connect the 10-pin cable to a corresponding 16-pin jack on the Doepfer mainframe bus (or on the MIDI/CV circuit-board). Supply voltage needs to be +/- 12 volts, 5-volt connections are not required. The wattage is +/- 30 mA, the module size 12 TE (Teileinheiten) = 60 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 snare 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 attack, decay and pitch 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 approx. 0.1 volt. The input only reacts to the positive slope of the signal.

Out carries the audio signal. This can be routed into a mixer (e.g. DRUM-99), a VCA or any other sound manipulating module. You may also use the output to connect the DRUM-05 module directly to your mixing console or audio-interface.

Parameters/Controls

The snare drum sound consists of three parts: two oscillators that use a triangle-like waveform and an additional noise part.

The oscillators' pitch is adjusted by **Tune.** This parameter can be externally controlled by a CV-source send to CV-input **Tune** with its corresponding attenuator.

The second path to pitch modulation is the **Pitch** control. This parameter sets the duration of a predefined pitch-bending that is also preset in its modulation-depth. This creates a typical sound-element of analogue tom-sounds as seen in products from Simmons or the TR909. The corresponding attenuateable CV-input **Pitch** allows control of this parameter through an external source, e.g. a CV-sequencer or LFO. Pitch duration will last approx. one second at its maximum.

Snap sets the decay-time of the noise element and therefore for the overall length of the snare drum sound. This parameter can be externally controlled using the attenuateable CV-input **Snap**. The noise element of the sound is disabled when a CV-voltage of zero volts is applied.

Decay sets the duration (decay time) of the tonal sound-component. This parameter can be controlled by an external source using the CV-input **Decay** with its corresponding attenuator.

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

Two additional parameters **D-Tune** and **Noise**, with corresponding controls on the top of the module, can be adjusted manually: **Noise** sets the volume of the noise sound-component of the snare-sound. **D-Tune** controls the amount of detuning between the two oscillators.

MFB

Operating Manual

DRUM-05
Snare Drum
Module