General

The DRUM-06 module basically derives from the tom circuit found in the MFB-503. It allows the same comprehensive sound editing. In addition, DRUM-06 offers CV-control over the parameters Decay, Tune, Pitch and Panorama. These parameters can be controlled by sources like envelope generators, LFOs or step-sequencers.

Set-up

DRUM-06 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 tom 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.

L Out R carry 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-06 module directly to your mixing console or audio-interface.

Parameters/Controls

The tom sound consists of four parts: a basic tone that derives from a triangle-like waveform, a harmonic that also uses a triangle-like waveform but decays faster, a short impulse and an additional noise part.

The basic tone's pitch is adjusted by **Tune**, ranging from approx. 60 to 200 Hz. 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.

Decay sets the overall duration (decay time) of the tom-sound, up to a maximum length of approx. two seconds. This parameter can be controlled by an external source using the CV-input **Decay** with its corresponding attenuator.

The Panorama-control places the Tom-sound in the stereo-panorama. This parameter can be controlled by external sources using the CV-input **Panorama**. This input will only accept positive voltages, so place the Panorama-control fully clockwise when applying a CV-voltage for modulation.

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

Two additional parameters **Attack** and **Noise**, with corresponding controls on the top of the module, can be adjusted manually:

Noise adds a noise-source to the tom-sound. Using this with the right intensity allows replicating the legendary electronic drum-sounds found in Simmons products.

Attack adds a short impulse with fixed duration to create additional percussiveness. The knob controls the level at which the Attack is mixed to the tom-sound.

Operating Manual

DRUM-06
Tom
Module