

## General

The SEQ-01 module is a step-sequencer, specially developed to create rhythms with MFB's DRUM-modules. Up to 12 drums/sounds can be triggered at the same time. Each pattern offers switchable A and B parts, allowing you to create two-bar-rhythms, too. Pattern-programming uses the favored, classic Roland TR-style with a light running through the steps. Of course, the SEQ-01 does not only work with drum-modules. There are lots of possible alternative uses for trigger-impulses in a modular-system: Sample & Hold, LFO-reset, switches, clock-division, sequencer, logic-modules, envelopes etc. Wherever a straight clock is usually used, like S&H or in clock-dividing-modules, the SEQ-01 allows easy rhythm-building.

## Set-up

The SEQ-01 module 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 corresponded jack on the Doepfer mainframe bus. Supply voltage needs to be +/- 12 volts, 5 volt is not needed. The wattage is 60 mA, the module size 20 TE (Teileinheiten) or 101.3 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.

## Function

### Selecting patterns

The 16 patterns are selected by pressing **Pattern** and one of the step buttons. Press but do NOT hold **Pattern** (the according LED will be lit), then press one of the sixteen step buttons. In stop-mode this will immediately call up the selected pattern. In playback-mode the selected pattern will start after the running pattern has been completed. Pattern advance to the next or previous pattern can be remote controlled by trigger-impulses. Connect a trigger source to inputs **Pattern +** or **Pattern -**.

### Start/stop

**Start/Stop** toggles between starting the sequence playback and stopping it. This function can be remote controlled by trigger-impulses. The **Start/Stop** input works just like the switch. The first impulse will start the playback, the next will stop the playback.

### A, A/B, B

This switch selects whether a pattern will play part A, part B or both parts alternating (which equals a two-bar pattern).

**Tip:** Due to the changing display, it is often easier to complete part A first and then move to part B while programming two-bar patterns.

### Instruments

The rotary switch **Instrument** selects the track/instrument for programming. The track names BD, SD, HH etc. only serve for clarity. Of course, it is possible to trigger any sound from any track.

## Steps

Steps in a track are set with the sequence playing. There's no way to set a step in stop-mode. A step is set by pressing any of the step buttons 1 to 16. To delete a trigger step, press the step button once more.

### Accent

Each step in a track can be programmed with one of three accent levels. Pressing **Accent** consecutively cycles through the three possible levels:

left LED lit = no accent      right LED lit = std. accent      both LEDs lit = max. accent

**INFO:** The effect of the accent function depends on the connected (drum)-module. Only those modules that accept dynamic trigger-values, fully support the SEQ-01's accent function.

### Reset

There are two ways to reset a pattern back to step 1. First, a reset is programmed by activating both OH and HH on the same step, e.g. step 13. In this case, the pattern will run up to step 12 and then restart from step 1. Programming HH- and OH-tracks therefore need a little care to avoid setting a reset point accidentally.

Secondly, the reset function can be remote-controlled. Simply feed a trigger-impulse, e.g. from a second sequencer, into the **Reset** input.

### Tempo/clock

The sequence tempo is controlled by the **Tempo** knob. The tempo is output to **Clock Out** in parallel, allowing to synchronize additional clock-dependent modules. The SEQ-01's internal clock runs at 96 ticks/bar and can be reduced to 16 ticks/bar. The actual setting can be displayed by pressing and holding **Accent** for at least a second. Now, the 16 step-LEDs display the status of shuffle, trigger-voltage and clock. LEDs 13 to 16 show the clock status:

step 13 = 96 internal    step 14 = 96 external    step 15 = 16 internal    step 16 = 16 external

To change the status, hold **Accent** and press the desired step. With both external settings activated, the tempo is controlled by an external clock-signal at **Clock In** input.

### Shuffle

The SEQ-01 offers 7 shuffle-settings to add liveliness to rhythms. The actual setting can be displayed by pressing and holding **Accent** for at least a second. Now, the 16 step-LEDs display the status of shuffle, trigger-voltage and clock. LEDs 1 to 8 show the shuffle status:

1 is the basic setting with shuffle deactivated, while 2-8 are increasing shuffle values. To change the status, hold **Accent** and press the desired step.

**INFO:** Shuffle does not work with clock resolutions of 16 ticks/bar (internal/external).

### Trigger-voltage

The SEQ-01's output-voltage can be varied between 1-10 volts to adapt to other manufacturer's modules or special purposes. The actual setting can be displayed by pressing

and holding **Accent** for at least a second. Now, the 16 step-LEDs display the status of shuffle, trigger-voltage and clock. LEDs 9 to 12 show the trigger-voltage status:

step 9 = 0...1 V      step 10 = 0...2,5 V      step 11 = 0...5 V      step 12 = 0...10 V

To change the status, hold **Accent** and press the desired step.

### **Saving patterns**

To avoid data loss, all patterns created with the SEQ-01 need to be saved before changing to another pattern or switching of the modular-system. A pattern is saved by pressing **Pattern** twice. A LED will light up and dim to confirm the save status. Saving patterns is possible in stop-mode as well as in playback-mode. However, saving with active playback will cause a slight delay once.

### **Preset-patterns**

The SEQ-01 also offers 16 internal preset-rhythms that were taken from the MFB-501 drum-machine. These presets are selected by pressing and holding **Pattern** and selecting one of the 16 step buttons. Preset-rhythms are not alterable. However, presets can be copied to the same position in pattern memory and then be edited. Simply, press **Pattern** twice. Upon switching the SEQ-01 on, preset-rhythm 1 will be selected. Preset-rhythms are:

1 = Heavy Rock 1	2 = Hard Rock 1	3 = Country 1	4 = Boogie 1
5 = Latin Rock 1	6 = Slow Blues 1	7 = Disco 1	8 = Funk 1
9 = Heavy Rock 2	10 = Hard Rock 2	11 = Country 2	12 = Boogie 2
13 = Latin Rock 2	14 = Slow Blues 2	15 = Disco 2	16 = Funk 2



# Operating manual

## SEQ-01 Module