

Programming steps

The steps of each track may be set with the sequencer being stopped or during playback.

Gate-tracks **1** to **8**: Activate a step by pressing the corresponding step-button **1** to **16** (corresponding LED blinks green). As long as the LED blinks, the **Value** control can be used to adjust the level of the gate-step, which equals a velocity value.

CV-tracks **9** to **16** are programmed in the same way. Here, use the **Value** control to adjust the level of the CV-output.

Pressing the respective step-button again, will delete the step. By defining another step, the preceding step is saved (LED permanently lit). A value for the new step can now be adjusted using the **Value** control.

HINT: Not every module can process gate-velocity.

Setting the pattern length

- Press and hold the **Last Step** button (LED lit)
- Add the step-button of the last step that shall be included in the pattern
- Release both buttons
- The length is now specified

The **A/B** button selects whether a pattern will only play an A-part (LED green), a B-part (LED red) or alternates between both parts (LED green/red). This equals a pattern with a length of two bars.

TIP: With two-bar-patterns, it is often easier to program the A- and B-parts one after another to avoid permanent switching between the parts.

Save patterns

- Press and hold the **SavePatt** button
- The currently selected pattern will be displayed by a step-LED
- Press an additional step-button **1** to **16** for the desired pattern
- Release the **SavePatt** button
- The pattern is saved (LED blinks shortly)

Delete patterns

- Press and hold the **LoadPatt** and **SavePatt** buttons commonly
- Press an additional step-button **1** to **16** for the desired pattern
- Release the **LoadPatt** and **SavePatt** buttons
- The pattern is deleted (both LEDs blink shortly)

Edit patterns

The values of already programmed steps can be reworked. It is possible to edit single or multiple steps simultaneously.

- Press and hold the **Select** button
- Now successively press all desired step-buttons – existing and new ones (LEDs blink)
- Release the **Select** button
- Use the **Value** control to adjust the desired value.
- Press the **Select** button again
- This terminates the edit-mode (step-LEDs permanently lit)

For multiple step edits, this procedure can be repeated as often as necessary.

Shuffle

The SEQ-01 Pro offers 15 shuffle-settings.

- Press and hold the **Shuffle** button
- The current mode will be displayed
- Press one of the step-buttons **1** to **16** to select the desired mode
- Release the **Shuffle** button
- The selected shuffle-mode becomes active

In mode 1, shuffle is deactivated while in modes 2 to 16, the shuffle-intensity increases with higher modes.

ATTENTION: With a value of 16 being select in the clock-menu (internal or external), a shuffle is not possible.

M-Bus

In addition to the gate- and CV-tracks, the SEQ-01 Pro also offers 16 further drum tracks via its M-Bus. These tracks follow the GM standard assignment (General MIDI). Like MIDI, M-Bus uses a serial data transmission, but works a lot faster. Unlike the front panel gate/CV-connectors, it is possible to generate 16 trigger- and 32 CV-signals per pattern here, without the use of any patch cords. The M-Bus on the circuit-board is connected to the corresponding modules by a special cable. The procedure to program M-Bus-tracks is identical to the regular tracks.

- Press and hold the **BD-CY** button (LED is lit green in its initial state)
- In addition, press the button for the desired track **1/BD** to **16/CY2** (LEDs of **BD-CY** button and of the selected tracks light up red)

Subsequently, the steps need to be entered using the step-button and the **Value** control as described earlier.

The 32 CV-tracks are programmed following the same procedure. The modulation targets are predetermined to match the different MFB DRUM-modules. These are printed on the front panel below the step-buttons. The CV-tracks **17-32** address the left printed parameters as targets (Tune/... Filter/... etc.), CV-tracks **33-48** address the right parameters (.../Dec .../Ton etc.).

The programming procedure is identical to the regular tracks: The controller value is adjusted per step by using the **Value** control.

After completion of the programming, the **BD-CY** button may be pressed again to return to the initial state (LED lit green).

HINT: The exact parameter assignments are listed in the manuals of the corresponding DRUM modules.

Selecting the MIDI-channel

- Press and hold the **Shift** and **Select** buttons simultaneously (LEDs blink red)
- Release both buttons
- Use a step-button **1** to **16** to select the desired MIDI-channel
- The LEDs of the **Shift** and **Select** buttons will turn off
- The MIDI-channel is now set

Clock-modes

- Step-button **1** = 96 internal
- Step-button **2** = 16 internal
- Step-button **3** = 96 external
- Step-button **4** = 16 external (shuffle inactive)
- Step-button **5** = 16 external (shuffle inactive, jack **Play I/O** set up as reset)
- Step-button **6** = MIDI clock 96 external
- Step-button **7** = MIDI clock 16 external

Selecting and programming patterns

Selecting banks and patterns

The SEQ-01 Pro can save a total of 48 patterns. These are organized in three banks holding 16 patterns each. Tracks 1 to 8 generate dynamic gate signals per pattern while tracks 9 to 16 generate CV-voltages.

Selecting Banks

- Press and hold the **Shift** button
- Use the **LoadPatt** button to switch between the banks consecutively Bank 1 (LED green), Bank 2 (LED red), Bank 3 (LED off)
- Release the **Shift** button
- The selected bank is now loaded

Loading Patterns

- Press and hold the **LoadPatt** button
- The selected pattern will be displayed by the step-LEDS **1** to **16**
- Use the step-buttons **1** to **16** to select the desired pattern
- Release the **LoadPatt** button
- The pattern is now selected
- With the sequencer running, the switch to the next pattern will take place with the start of the next bar

Selecting Tracks

- Press and hold **Track 1-16** (LED is lit green in its initial state)
- In addition, press the button for the desired track **1** to **16** (LEDs of button **Track 1-16** and of the selected track light up red)

After completion of the pattern programming, a button **Track 1-16** may be pressed again to return to the initial state (LED of button **Track 1-16** is lit green).

General

The SEQ-01 Pro module is a step-sequencer specifically designed to create rhythmic sequences. It allows generating eight trigger-tracks and eight CV-tracks per pattern. In addition to the output of gate- and CV-signals, the SEQ-01 Pro allows to address compatible modules in parallel via its M-Bus, such as MFB's DRUM-series. Here, it offers control for 32 additional CV-tracks without necessary patching.

Setup

The SEQ-01 Pro module is compatible to Doepfer's A-100 modular system in design, bus-power-supply and CV/gate-voltages. The 10-pin connector-cable has to be connected to the 16-pin bus-circuit-board. The supply voltage needs to be +/- 12 volts. A separate voltage of 5 volts is not needed. The device's power consumption is approximately 60 mA. The module's width measures 20 HP = 101.3 mm.

ATTENTION: Please carefully pay attention to correct polarity! The colored lead of the ribbon cable must point downwards, i.e.: The cable must not be twisted.

Play-Functions

- The **Play** button starts (LED lit) and stops (LED unlit) the sequencer
- The **Tempo** control adjusts the sequencer's speed

With any of the LEDs of the buttons **Track 1-16**, **BD-CY**, **17-32** or **33-48** being lit green, the SEQ-01 Pro is in its initial state. In this mode, the tracks may be muted individually by pressing the step-buttons **1** to **16**. The corresponding LEDs will then be lit red.

Clock-Settings

The sequencer can output its internal clock as well as start/stop-transport-signals. It may also be synchronized to an external clock where it will receive the corresponding external start/stop-commands.

The internal clock has a resolution of 96 ticks per bar but may also be set to 16 ticks. This signal (+3 volts) is sent to the **Clock I/O** jack. In parallel, a start/stop-signal (+ 3 volts) will be sent to the **Play I/O** jack.

With the sequencer being set to synchronize to an external clock, the **Clock I/O** and **Play I/O** jacks as well as the **MIDI In** jack (3.5-mm-adaptor necessary) may be used to receive the corresponding external synchronization signals and transport control commands.

To specify the clock, press and hold the **Shift** button for at least one second. The step-buttons' LEDs **1** to **7** will display the current setting. By pressing the corresponding step-button, the mode can be changed. This setting will be preserved after switching off the unit.

Operating Manual

SEQ-01 PRO Module



