Welcome to the A-157 8x16 Trigger Matrix. We at Doepfer would like to thank you for purchasing this product. The A-157 8x16 Trigger Matrix is a highly sophisticated, pattern-based trigger sequencer that allows you to come up with straightforward beats at the wink of an eye as well as very complex rhythmic phrases and ever-shifting caleidoscopic patterns.

To make the A-157 available to you as quickly as possible, we decided to release a preliminary version first – the one that you are having in front of you right now. It is equipped with the most important basic functions you will need for beat programming or for creating trigger sequences respectively. While you are reading this, we are working hard on many amazing features and additional functions that will be made available very soon. Updating the firmware of your unit in the future can be done very easily via USB. Please keep referring to www.doepfer.de regularly for any news concerning your A-157.

In this preliminary manual, you will find a description of the functions currently implemented as well as the setup instructions. Please setup and explore your new A-157 carefully and enjoy yourself while doing so. Rest assured there is a lot more functions to come around very soon – we just did not mean to keep you waiting.

A-157 features currently implemented:

- eight tracks of up to 16 steps each
- step programming using matrix grid, or real-time programming
- shifting selected tracks step-by-step
- invert and copy functions for quick track creation
- individual number of steps for each track for creating polyrhythms or odd time signatures
- four different playback modes for each track (forward / backwards / pendulum / random)
- track mute
- each active step puts out a +12V trigger via A-157-2 trigger output module. In the final version, trigger levels will be programmable individually for each step.
- start / stop / reset / clock (shifting step-by-step) functions can be controlled manually or remotely, using the A-157-3 control input module

The Trigger-Output Module A-157-2 and the Control-Input Module A-157-3 are both required to drive the Trigger Matrix:

The Trigger-Out Module A-157-2 is where the trigger signals for each sequencer track can be tapped from.

The Control-Input Module A-157-3 is used to control the internal clock generator of the sequencer resp. its run functions (start / stop / reset / clock). You can either control them manually using the push buttons, or by applying external signals of ≥ +3 Volts.

A-157-2

trigger signal outputs (+12V)

A-157-3

control keys / inputs

Start
Hitting the key (or routing a positive pulse into the respective jack) will get the sequencer going from the current step position.

Stop
Hitting the key (or routing a positive pulse into the respective jack) will stop the sequencer at the current step position.

Reset
With the next incoming clock pulse, a key hit (or routing a positive pulse into the respective jack) will start the sequence at step #1.

Clock
Each time you are hitting the key (or routing a positive pulse into the respective jack), the sequencer will advance to the next step. A steady clock signal (pulswave) is used to drive the sequencer at a steady pace.

Func. 1-4
(not implemented yet – available soon)
Step keys
• select / deselect step(s) ("Triggers")
LED of selected step(s) light up.

Select keys
• select track(s)
LED of selected track(s) light up.

Function keys
• Used to perform function on selected track(s)
First select one or more tracks with the select keys, then perform desired function.
(Shift functions (reversed labelled) available soon)

Tr Set / Tr Delete
Hit keys while sequencer is active to set or delete steps ("triggers") in realtime within the selected track(s).

Shift L / Shift R
Hit keys repeatedly to shift selected track(s) back or forth step-by-step.

Invert
Inverts the selected track(s): muted steps will be active and active steps will be muted.

Swap
Swaps the first eight steps of the selected track(s) with the last eight steps.

A-B / A-B C-D
(not implemented yet – available soon)

First / Last
Hit keys and steps to select first resp. last step of a selected track.

Forw / Backw / Pend / Rand
Hit key to determine playback mode of selected track(s): forward, backwards, pendulum (first/last step will be played back only once), random. Hit Forw/Backw simultaneously to create forward/backwards sequence (first/last step will be repeated twice).

Recall
(Storage functions not implemented yet – available soon)

Mute keys
• mute / unmute track(s)
LED of muted track(s) light up.
(Submenus not implemented yet – available soon)

Notes:
• Select / deselect step(s) using step key(s) at any time.
• Mute / unmute track(s) using Mute key(s) at any time.
• To perform functions, select track(s) with the select keys first, then perform desired function using function key.
A-157 Setup Instructions

Setting up your A-157 8x16 Trigger Matrix:

The A-157-1 main module needs to be mounted in your eurorack case side by side the A-157-2 trigger output module and the A-157-3 control input module. Simply connect flat ribbon cables with the following sockets:

- (1) the socket labelled „JP2“ of the A-157-2 trigger output module with the socket labelled „JP3“ on the A-157-1 trigger matrix PCB.
- (2) the socket labelled „JP1“ of the A-157-3 control input module with the socket labelled „JP4“ on the A-157-1 trigger matrix PCB.
- (3) the socket labelled „JP1“ of the A-157-2 trigger output module with the A-100 bus power connector.
- (4) the socket labelled „JP1“ of the A-157-1 trigger matrix module with the A-100 bus power connector.

Please make sure that the position of the flat ribbon cables coloured stripes fit to the figure resp. to the labelling on the PCBs.

(Please install carefully and gently since Doepfer cannot accept responsibility or liability for modules damaged by installing them improperly or by using brute force.)

![Diagram of A-157 modules connections](image-url)