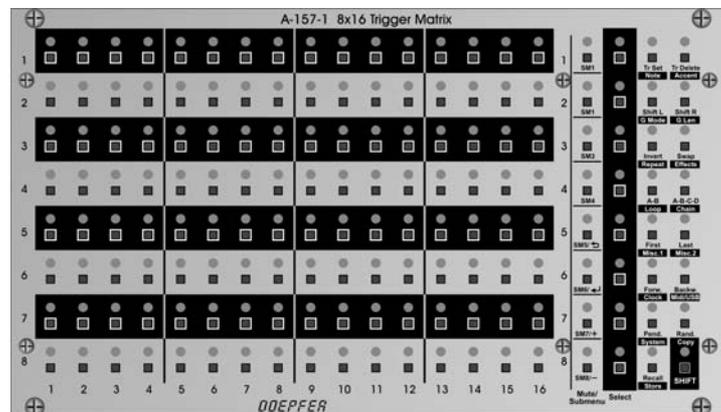


1. Introduction

Before installing the A-157-1 please read carefully the setup instructions on pages 3 and 4 !



The A-157-1 Trigger Sequencer 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 kaleidoscopic patterns.

The A-157-1 is equipped with the most important functions you will need for beat programming or for creating trigger sequences respectively. More features and additional functions will be made available in the future. Updating the firmware of your unit can be done very easily via USB. Please keep referring to our website www.doepfer.de regularly for any news concerning your A-157-1.

In this manual, you will find a description of the functions currently implemented as well as the setup instructions. Please setup and explore your new A-157-1 carefully and enjoy yourself while doing so.

The **Trigger-Output Module A-157-2** and the **Control-Input Module A-157-3** are both required to drive the A-157-1 Trigger-Sequencer.

2. Overview

A-157-1 Version 1.0 features 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 function for quicker 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
 - 64 memory locations to store patterns (non volatile).
 - chaining function chains two resp. four adjacent patterns into a longer sequence.
- 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.

3. Setting up the A-157-1

WARNING: STRICTLY OBSERVE THESE INSTRUCTIONS!

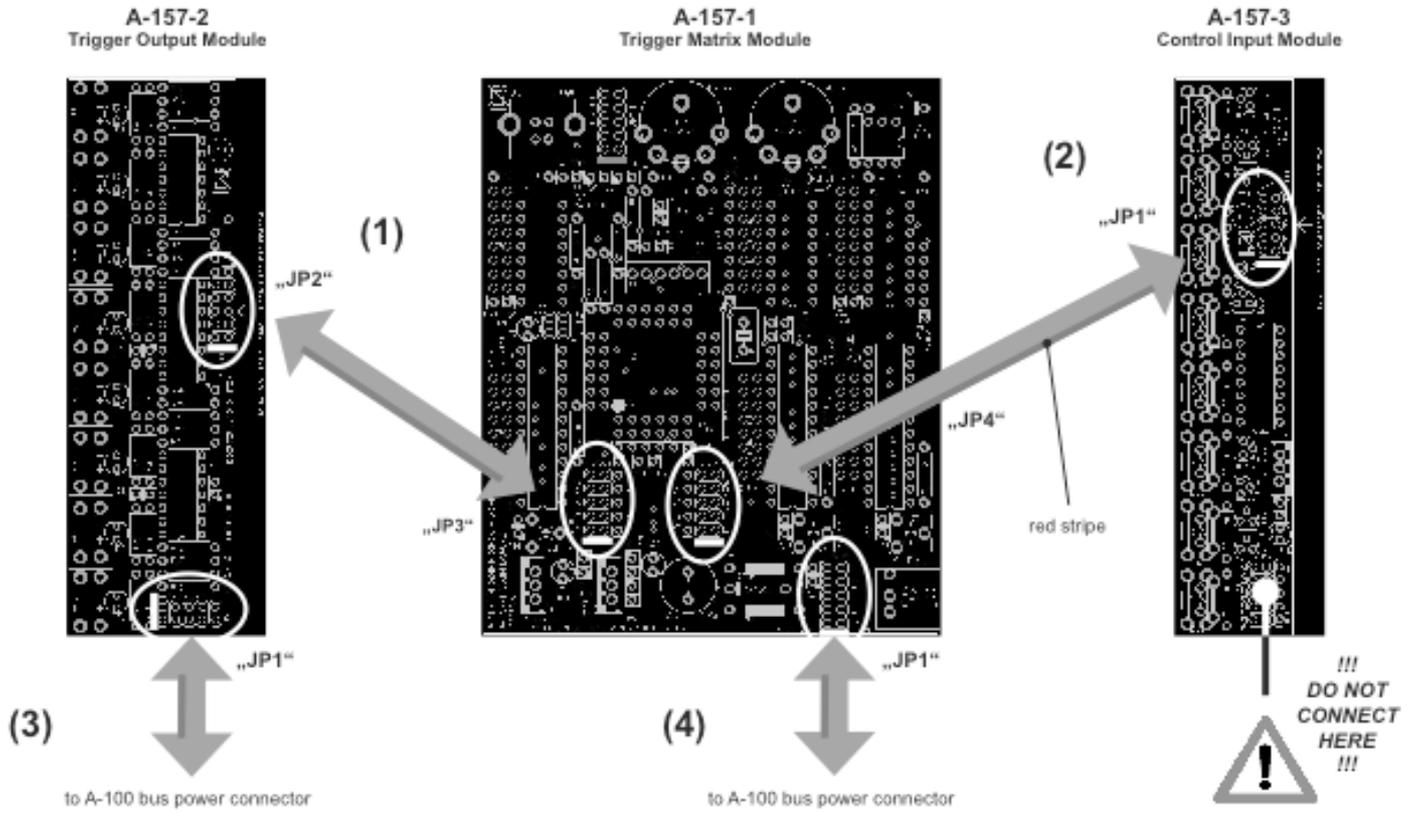
Install carefully and gently. Doepfer cannot accept responsibility or liability for modules damaged by installing them improperly or by using brute force.

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:

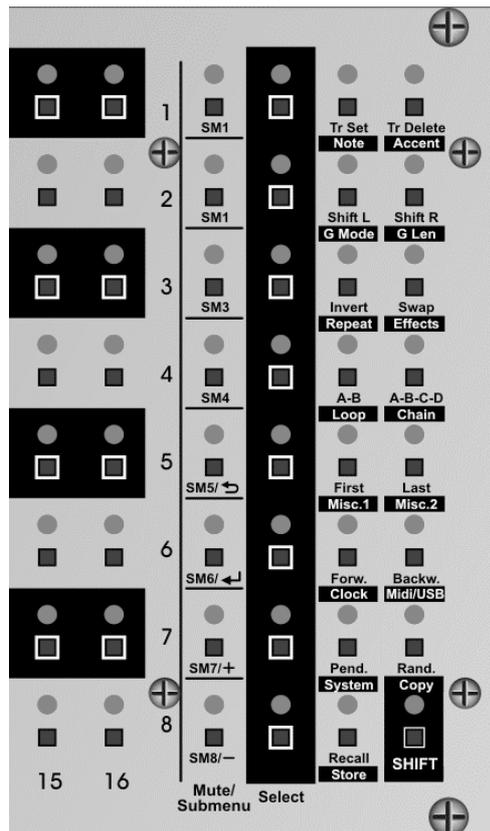
- (1) the socket labelled „JP2“ of the A-157-2 trigger output module with the socket labelled „JP3“ on the A-157-1 trigger matrix PCB.
- (2) the socket labelled „JP1“ of the A-157-3 control input module with the socket labelled „JP4“ on the A-157-1 trigger matrix PCB.
- (3) the socket labelled „JP1“ 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 on the following page resp. to the labelling on the PCBs.

The **figure on the following page** will show you clearly all necessary connections. Again – please strictly observe these instructions!



4. Controls



Here you will find an overview over the different kinds of controls:

SHIFT key

- access to sub functions / sub menus
=> LED lights up, then press function key.

Step („matrix“) keys

- select / deselect step(s) („Triggers“)
=> LED of selected step(s) light up.
- pattern selection
(with recall / store function – see next page)

Mute keys

- mute / unmute track(s)
=> LED of muted track(s) light up.
(Submenus not yet implemented)

Select keys

- select track(s)
=> LED of selected track(s) light up.

Function keys

- Used to perform function (on selected track(s) or global)
=> First select one or more tracks with the select keys,
then perform desired function.
(Shift functions (reversed labelled) currently
implemented for store function – see next page)

5. Functions

Here you will find a description of all functions available in the current operation software version.

5.1. Function keys are used to perform a function on selected track(s)

=> First select one or more tracks with the **select keys**, then perform desired function with a **function key**.

(Shift functions (reversed labelled) currently implemented for store function)

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

Daisy-chains two resp. four adjacent patterns for playback or programming (this is a global, not a track-related function). Description see below.

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.

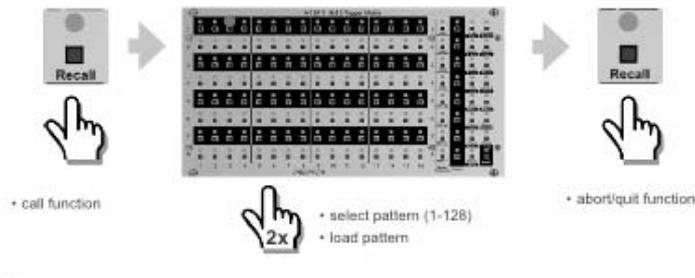
Recall / Store

Functions for recalling and storing 64 patterns (using **SHIFT**). Description see below.

Notes:

- Select / deselect step(s) using step key(s) at any time.
- Mute / unmute track(s) using Mute key(s) at any time.
- The A-B / A-B-C-D keys (pattern chaining) can also be used live while the sequencer is running.
- To perform functions, select track(s) with the select keys first, then perform desired function using function key.

5.2. Recall / Store keys – loading and saving patterns



5.2.1. Loading pattern:

Press **Recall/Store** (Recall/Store LED lights up). The matrix LED of the pattern currently active will start flashing.

Now the matrix can be used to select a pattern memory location. The memory locations

1 – 64 contain all possible pattern settings (see above).
65 – 128 contain copies of the patterns 1 – 64 but *without* track mute settings. These copies will be generated automatically when storing patterns.
 When loading such a pattern, the currently active track mute settings will be applied to this pattern. In other words: a new pattern is loaded but the currently active track mutes will remain unchanged – very useful in a live situation.

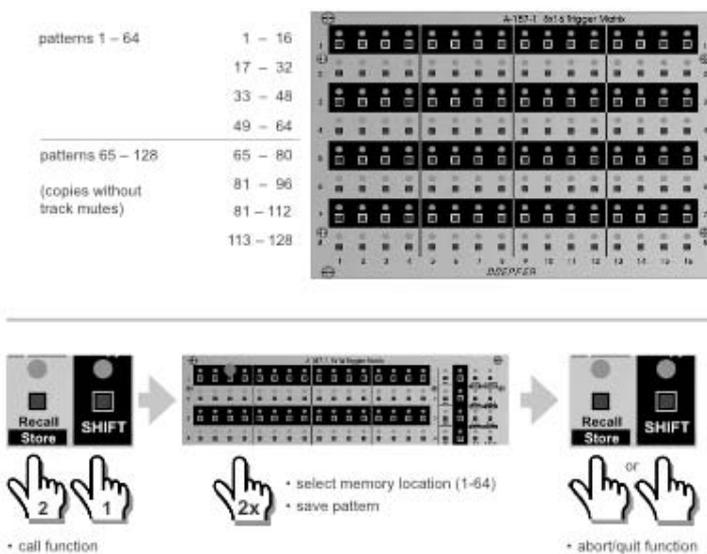
Press **matrix key** (LED flashes). The memory location has been selected.

Press **matrix key** again. The pattern has been loaded. The matrix shows the step view again.

Pressing **Recall/Store** once again instead of a matrix key will cancel the selection or abort the pattern-loading function respectively.

patterns 1 – 64	1 – 16	
	17 – 32	
	33 – 48	
	49 – 64	
patterns 65 – 128	65 – 80	
	81 – 96	
(copies without track mutes)	81 – 112	
	113 – 128	

The A-157-1 module features **64 memories** which permanently store all current pattern settings, i.e. 8x16 matrix steps, first/last steps, running directions, and track mutes.



5.2.2. Saving pattern:

Press **SHIFT + Recall/Store** (both LEDs light up). The matrix LED of the pattern currently active will start flashing.

Now the matrix can be used to select the desired memory location 1-64 (see above).

Press **matrix key** (LED flashes). The memory location has been selected.

Press **matrix key** again. The pattern has been saved. The matrix shows the step view again.

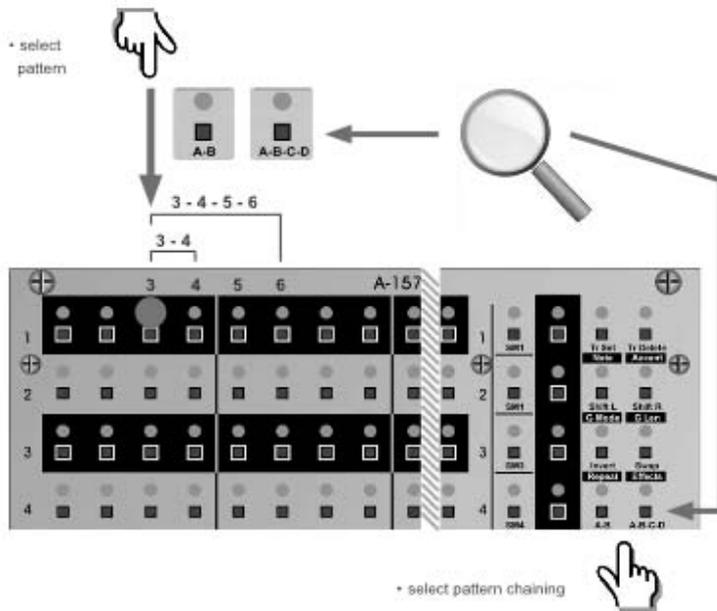
Pressing **Recall/Store** once again instead of a matrix key will cancel the selection or abort the pattern-storing function respectively.

WARNING:

When loading a pattern from memory, the pattern currently active resp. loaded into the edit buffer will be overwritten. Edits on the current pattern will be lost. Be warned, there is no undo function!

When writing a pattern into memory, the pattern in the memory location selected will be overwritten – again, there is no undo!

5.3. A-B / A-B-C-D keys – chaining patterns



You can chain two resp. four adjacent patterns for playing back or programming a longer sequence.

Load and play a pattern from memory, e.g. #3 (=> see recall function, page 7).

Press **A-B** or **A-B-C-D** key (the order of these two programming steps can be neglected).

With pattern chaining active (**A-B** / **A-B-C-D**), a sequence of patterns will be loaded or played back respectively. The sequence is made up of the selected pattern and the next subsequent pattern in the row (resp. the next three patterns in line). It does not play a role whether these patterns contain active steps or not.

Example: If pattern #3 is loaded resp. played back, the sequencer will play the pattern sequence 3 - 4 or 3 - 4 - 5 - 6 respectively.

All these sequence patterns can now be edited while the sequencer is running or having a little break.

When loading or saving patterns while pattern chaining is active, the respective A-B or A-B-C-D pattern sequence will be loaded / saved.

WARNING:

When loading a pattern from memory, the edit buffer will be overwritten. This means, the pattern currently active and the next subsequent pattern in the row (resp. the next three patterns in line) will be overwritten.

When writing a pattern into memory, the pattern in the memory location selected and the next subsequent pattern in the row (resp. the next three patterns in line) will be overwritten.

Again – there is no undo function! Think twice before hitting a key.