robaux
SWT 16+

MIDI Expander Kit

SWT16+ MIDI Expander

With the SWT16+ you can now use MIDI devices like drum machines or samplers.

Each track of the sequencer can now output an individual MIDI note to one of 16 MIDI channels.

These extended functions are made possible by an alternative firmware, which is based on the original firmware. However, to enable the new MIDI output, the previous functions Trigger Mod and Output Routing have been removed.

This manual describes the new MIDI functions. To learn the basic operation of the sequencer, please refer to the official manual.
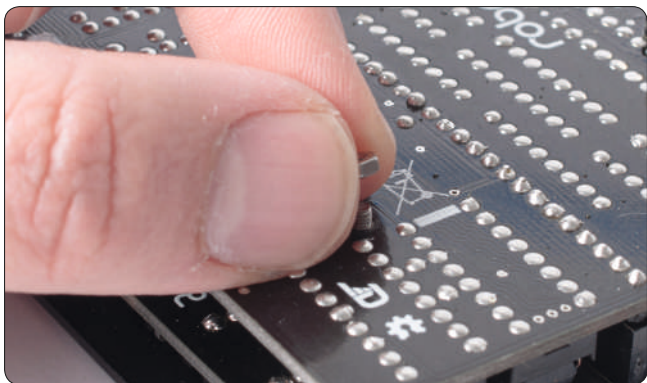
Installation

To use the MIDI functions of the sequencer, it is necessary to update the firmware. In addition, the adapter is required to output the MIDI data.
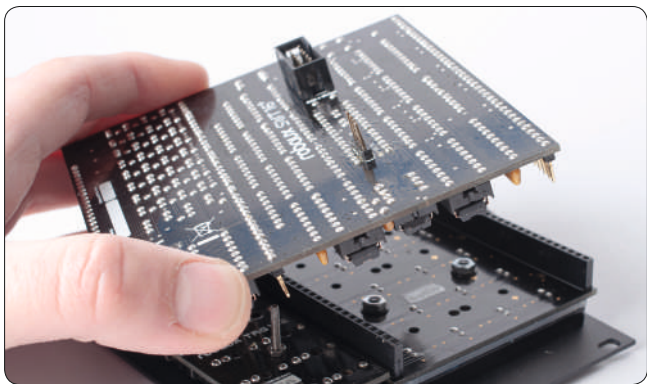
Warning!
The installation of the firmware chip and the adapter must be carried out by a specialist. The installation is at your own risk. Robaux accepts no liability for improper installation and possible damage. Installation of the expander may void any applicable warranty.

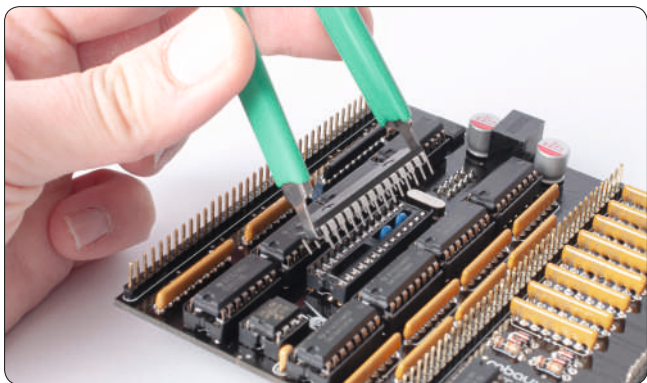If you are sure to make the modification, proceed as follows.

Remove the SWT16+ sequencer from your Eurorack. Also remove the power cable from the module.
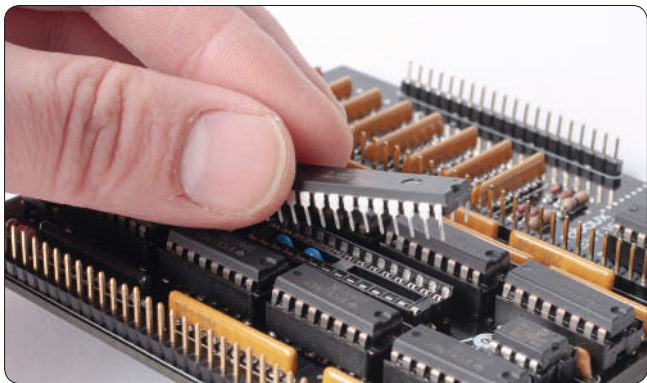
Loosen the small screw located on the lower right side of the back of the module.

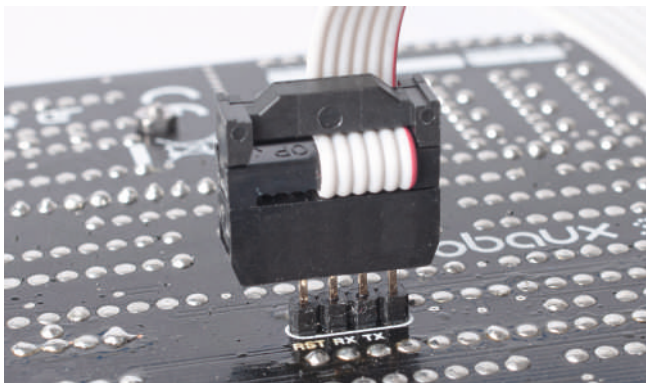
Now you can remove the main board of the sequencer.

Carefully remove the chip from the main board as shown in the photo.

Take the new firmware chip and put it into the empty socket. Make sure that the nose points down as shown in the picture.

Now put the mainboard back on the module. Press it firmly so that all connections are tight. Connect the adapter to the programmer port.

Make sure that the red stripe is pointing upwards, as shown in the picture. The installation is now complete.

Operation

The operation of the sequencer has not changed fundamentally due to the change of the firmware and the installation of the adapter. Only Trigger Mod and Output Routing are no longer available and have been replaced by the new MIDI settings.

The sequencer can now output MIDI notes on tracks 1-15. The 16th track controls the accent like a TR machine. Of course, this track still outputs a trigger signal via the 16th jack.

Setting the MIDI channel for a track.
Use the ⬆ **shift button** and the ⬒ **values button** to select Track Values. Then use the white key 5 to select the MIDI channel setting. Now use the orange keys 1-15 to select the track to which you want to assign a MIDI channel. Use the orange keys 1-16 to select the MIDI channel 1-16. To select another track, simply press the white key 5 again and select the channel using the orange keys.

Setting the MIDI note for a track.
Use the ⬆ **shift button** and the ⬒ **values button** to select Track Values. Then use the white key 6 to select the MIDI note setting. Now use the orange keys to select the note which the channel should play. The keys 1-12 correspond to the 12 notes of an octave. This means key 1 corresponds to C, key 2 corresponds to C#, key 3 corresponds to D and so on.

With the orange keys 13-16 you can set the octave from 0 to 3 on which the note is sent. For example, if you want the note F2 to be played, select the orange key 6 for F and the orange key 15 for octave 2. To select another track, simply press the white key 6 again and then select the note again using the orange keys.

If a key is pressed in this selection, the MIDI note on the channel is immediately transmitted. This makes it easier to select the correct notes. If necessary, you can deactivate this function in the Util menu.

Velocity

On channel 16, you can set the global velocity value of MIDI notes. Use keys 1-12 to select the velocity level, and keys 13-16 to adjust the intensity of the accent in four steps. Programming the accent, is done via track 16: You can program it like any other track. However, this track does not output any MIDI notes, but adds a little more velocity to the global velocity setting.

✿ Util

The Util menu has been streamlined in this version of the firmware.

Auto Reset

Use the first button to choose whether the sequencer should start again from step one, if there is no clock signal for some time.

Tap Play

Press the second button to set whether your taps sound in real time or quantized when recording in tap mode. This only applies to tapping, your steps are recorded quantized.

Pre-listen MIDI-Notes

Use the orange button three to enable or disable pre-listening to a MIDI note in the track values mode.

Confirm Delete

Press the fifth button to specify if you want a confirmation prompt before deleting something. This prevents a track, a pattern or a preset from accidentally being deleted.

MIDI Panic

Press key five to send a MIDI panic to stop any hanging MIDI notes.

Debug Mode

With debug mode, you can check if all triggers, buttons, and LEDs work. Press Button 13 and the sequencer stops. If you then press the buttons 1-16, the respective lamp lights up, and the corresponding trigger is triggered.

To exit this mode, hold down shift + button 13.

💡 You can also use this to turn the sequencer into a 16-trigger pad.

Factory Reset

Press and hold the ♩ **presets button** in the Util Mode to execute a factory reset. A flashing F appears. Press the F to perform the reset. Please note that all data will be irrevocably deleted!

Version

Press the ▪ **copy button** to display the current firmware version.