MIDIbox DigiRoland Project

Introduction

The Midibox EuRoland project aims to be a **4U Re-Edit of Analog Drum Parts of Roland TR Drumachines** designed to fit in the Eurorack size Format, to be driven trought MIDI or CV.

It's the Merging of these projects:

- MB-606RE
- MB-808RE
- MB-909RE

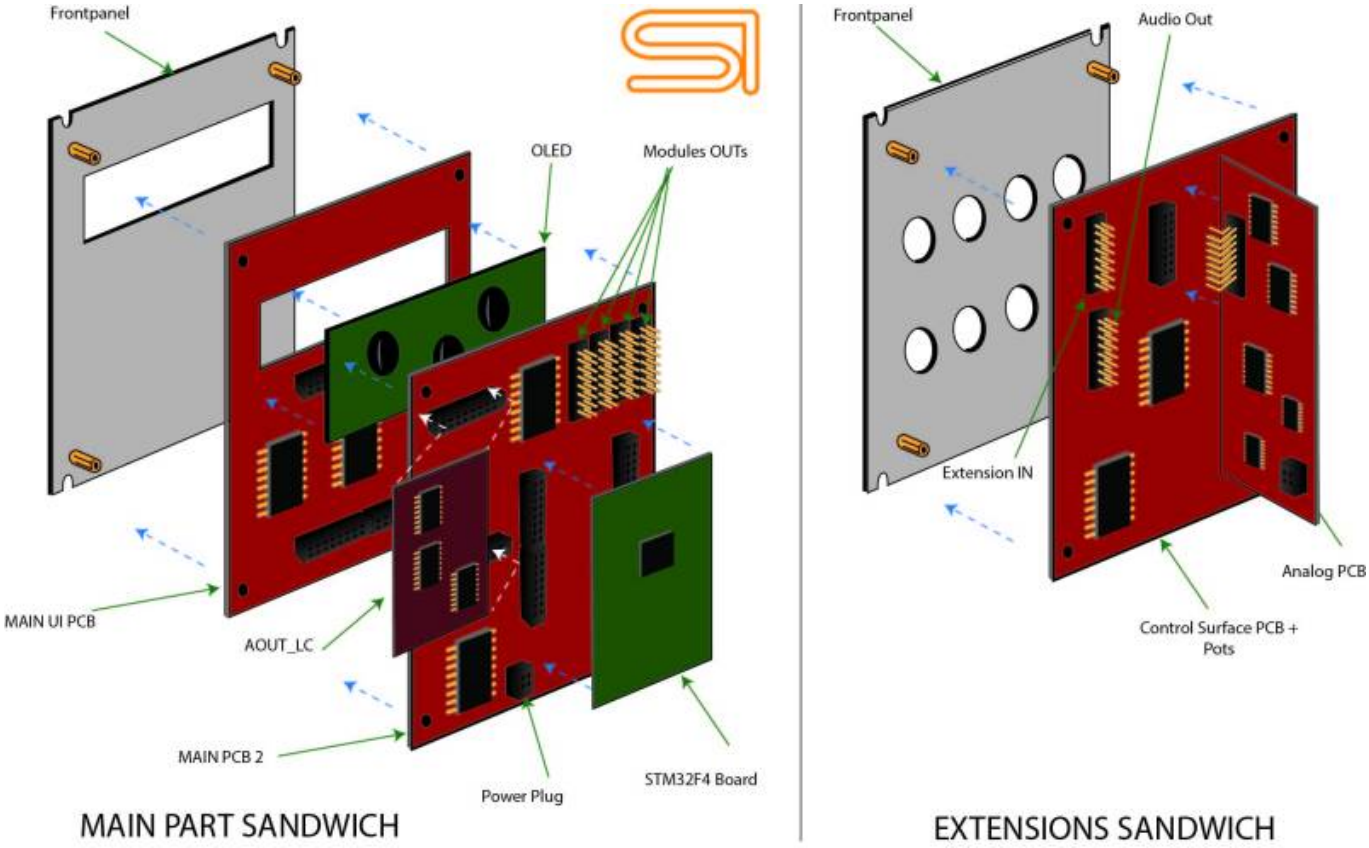
Community users working on it

- **Phatline**
- **Psykhaze**
- **Antichambre**

Getting Involved ?

Just let a Private message on the forum to users already involved

General Design



2 Cases of use :

- **1. Midi-Interface:** Use the MB-Modulbox Standartmodules, for Digital UI and CV+Trig-Generation
- **2. Analog Interface:** Just Plug CV or Trig Jacks into the Analog Modules...without Midibox.

Workshare

606

BD+SD > Psykhaze
CY+HH > Phatline

808

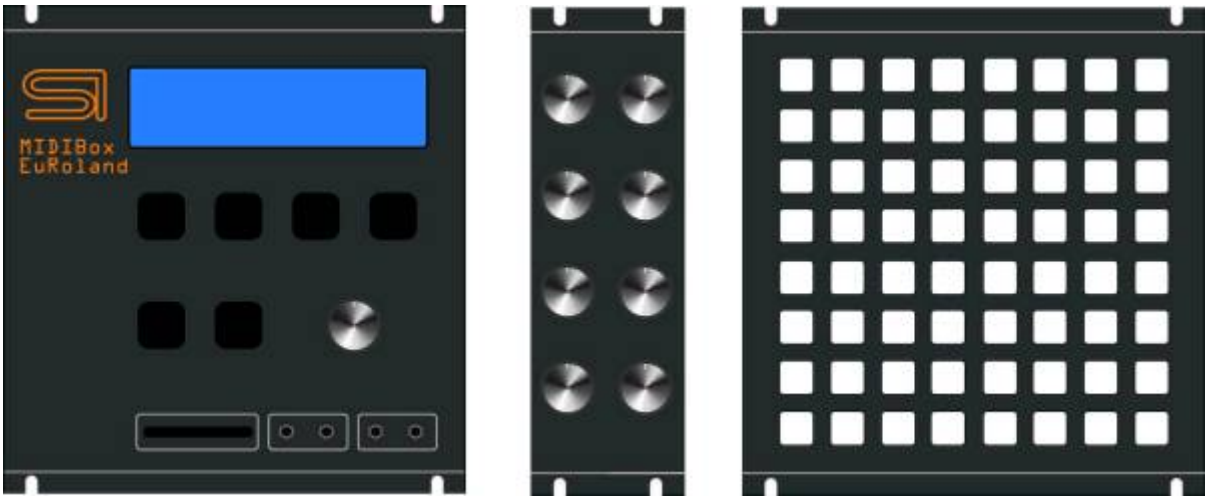
BD, SD, TOM > Psykhaze
CY, HH, COWBELL > Phatline

909

BD, TOM, SAMPLER-Voices > Psykhaze
SD, RIM > Phatline

Configuration

MIDI Use



MB-Modulbox Main PCB UI

Access to System-Settings, Channel, NoteNumbers
CV+Trig Out-Jacks for Euroland Drum Modules

MB-Modulbox 8xPotentiometer Module

When using the Euroland Modules via Midi, then there are some Performance Parameters aviable:
All Functions have effect on all 8 Voices @ once.

- **1.Velocity Offset** (-+64 > with Center Postiton = normal)
- **2.Velocity Kill depending Note Kill** (-+64 > with Center Position = normal > Full Spectrum)
- **3.Random Kill** (0=full Kill, 127 no Kill, Normal Position > 127)
- **4.Velocity 2 TriggerLength** (-+64 > with Center Position = normal 10ms, turn right:time inc by velocity in%, turn left:decrease%)
- **5.Accent:** (0-127-normal 127)
- **6.——:** could be something like Roll
- **7.——:** not used, could be something like a Accent for a Group of CVs
- **8.——:** not used, could be something like a Accent for a Group of CVs

accessible via MB-Modulbox 8xPot - PCB. Just plug it in, and acitivate the AIN-Port in MIOS

MB-Modulbox 8x8 LED-Button-Matrix

Set CV + Trig Routing (some kind of trigger matrix), standard is 1:1 routing, so no need for this if you use a fixed setup.

Analog Use

Here are only the Analog-Drum-PCB discussed, since all other Digital UI is based on MB-Modulbox Standart Modules, the MB-Modulbox Main PCB2 is special Variant, described here.

Software Tools used

- **Inkscape Vector Drawing Software** - Front panel Concept Drawing
- **KiCAD PCB** - PCB Design | **KiCAD Librairies**
- **Code::Blocks Integrated Development environment** - MIOS programming

Eurorack Relative

- **Eurorack Design 3U Height** *=5,25“=133mm-rails=***128,5mm** .
- **Modules Frontpanels are 8HP-multiple wide** *(8HP=***40,3mm***)* see ***Eurorack Specification***.
  Frontpanel back spacers glued with JB-weld to avoid front screwing. **Eurorack Templates PDF** | **Eurorack Templates DXF**
- **PCB Size is 100mm height** To stay compliant to ***Eurocard Specification***

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