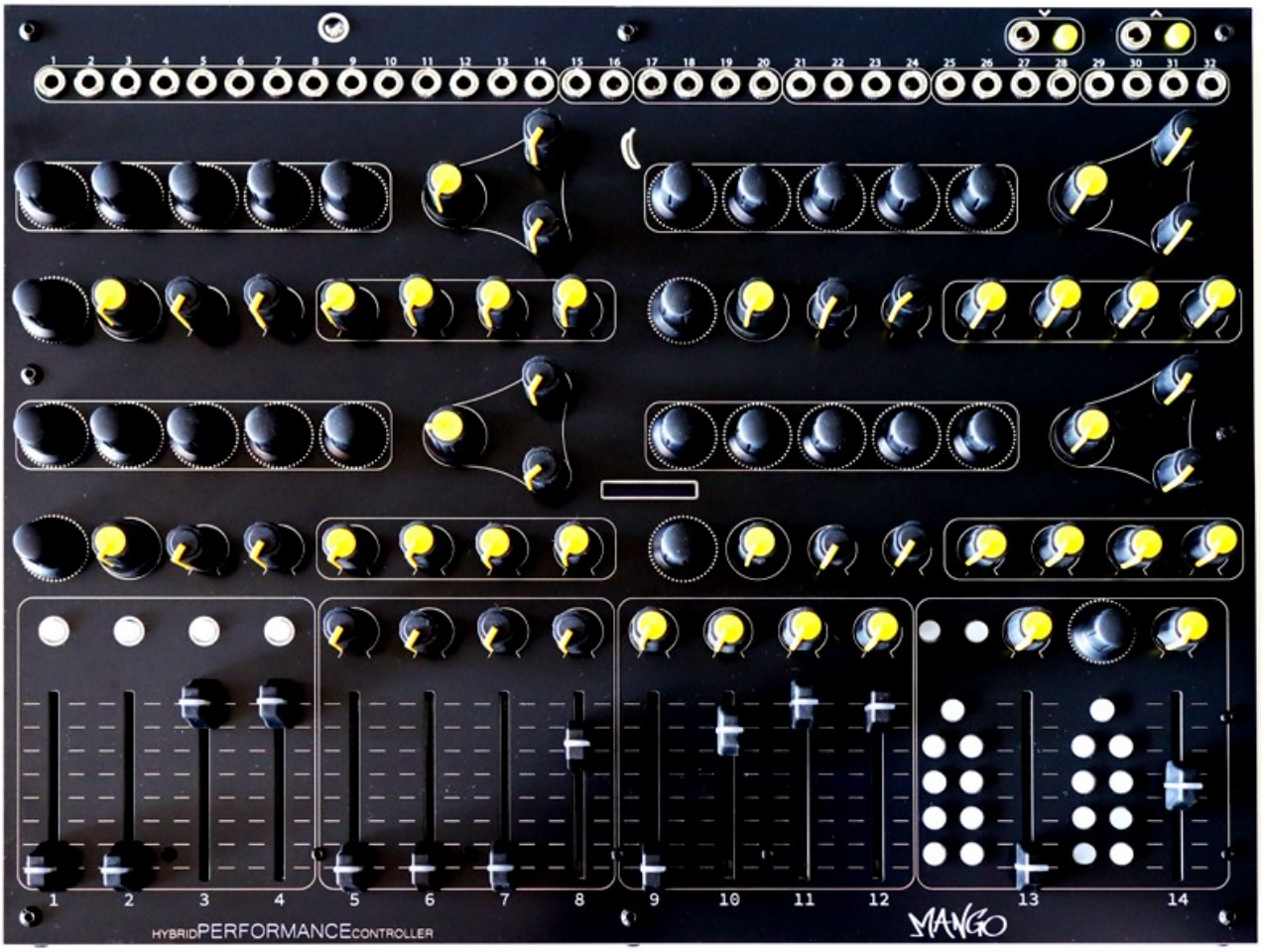
Mango – MIDI & CV Controller
Manual V1.0 2025



Mango arrives to you flashed with the latest firmware by ShanteaControls and a NoisyFruits factory preset that covers all functions, controls and adressing of buttons and LEDs.

OLED Display 128 x 16px

- minimum realtime indication of values, channels and adresses
- best to figure out which component is already adressed in the editor

Controls

14 x 45mm LED faders

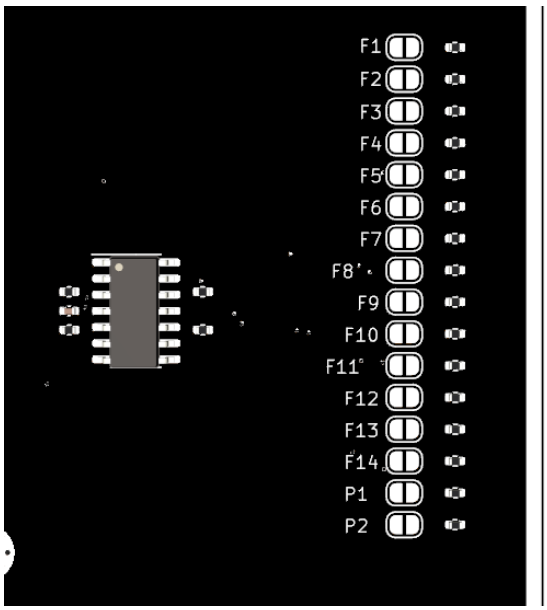
- fully MIDI mappable with custom ranging, adressing and polarity

- each fader is hardwired to a CV output (1-14) and covers a range from 0-5V or 0-10V.

Hint: the faders are meant as level control for VCAs and they mostly expect a range from 0-5V to cover full scale levelling.

The range for each fader range is customizable on the backside of the mainboard with solder bridges. Yes, this is pretty unconventional, but needed to save space and parts. Don´t worry! Jumping or breaking them is an easy task!

Just make sure you´re not providing too much heat for a longer time. Blobbing and unblobbing a spot should work below a second.



IMPORTANT NOTE!!!

Please unscrew the unit from top! Don´t remove the bottom plate!

There are spacers in between bottom and mainboard and after all you need to unscrew from top anyway to complete the assembly again properly.

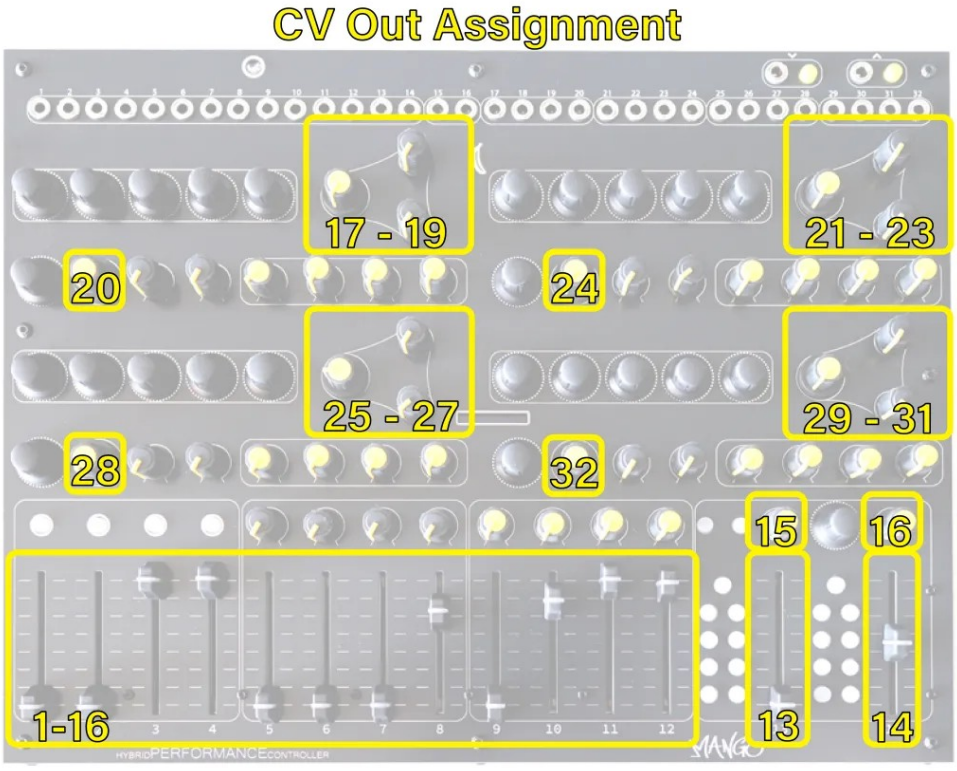
The faders are marked from F1 – F14 and you will also find P1 & P2. These are the 2 potentiometers above faders 13 & 14.

For hardcore hackers and if you need a more customized voltage range:

The solder bridges act as simple voltage divider „switches“ feeded by 10V, dividedin half by 10k resistors. Yeah, very small 0402 resistors …

42 x Potentiometers (18 of them with CV output)

- fully MIDI mappable with custom ranging, adressing and polarity
- each potentiometer has a yellow cap or marking
- 16 potentiometers with fixed CV out range
  from 0-10V, 2 customizable (as mentioned before)



Hint: the potentiometers are meant to control all kinds of CV related inputs, mostly expecting a range of 10V. In many cases CV inputs are designed for bipolar signals like -5V to +5V. Depending on your input and if provided, you will need to adjust the offset properly to cover the full range.

NOTE: the analog controls (faders, potentiometers) can´t be customized in the editor. They´re are purely analog without a digital resolution and not all of the potentiometers have a CV output!

25 x Encoders

- endless rotary encoders with push buttons and SIFAM caps

- fully MIDI mapable

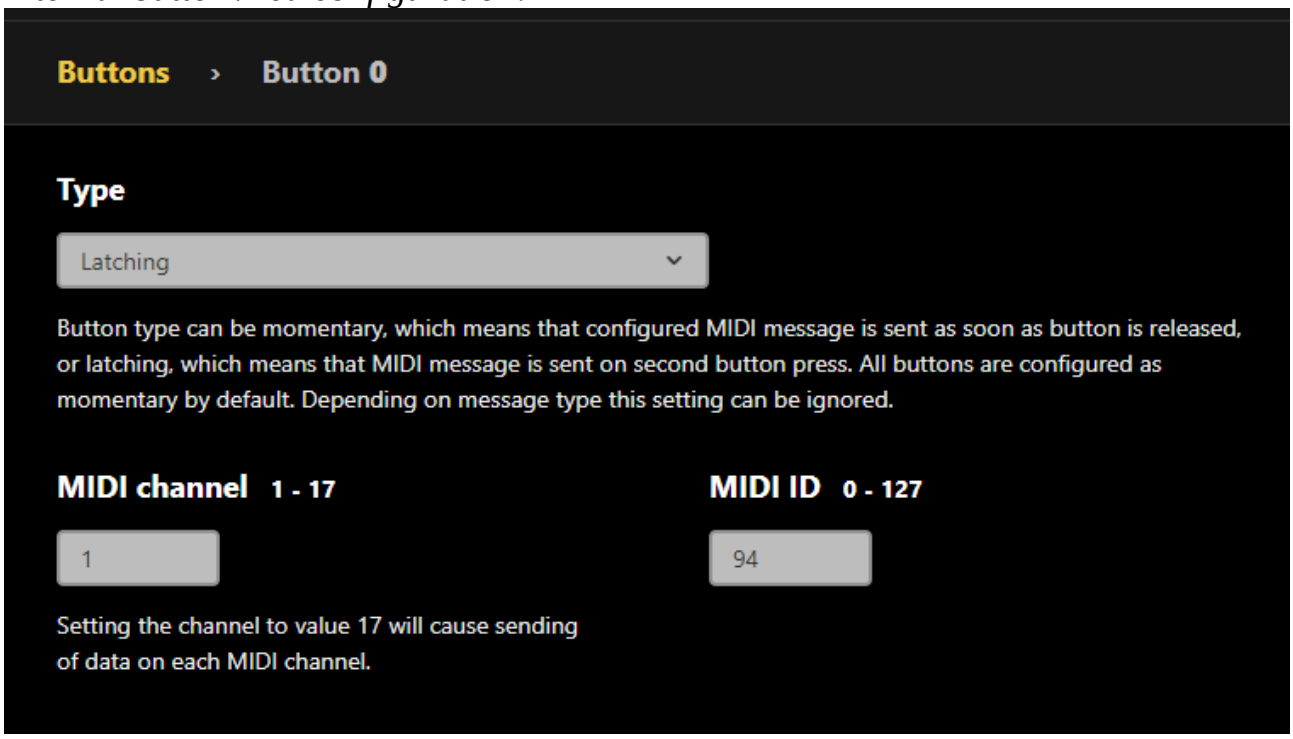
Note: Encoders are considered as buttons in the editor and contain of two buttons. So their addressing can be found and changed in the button menu.

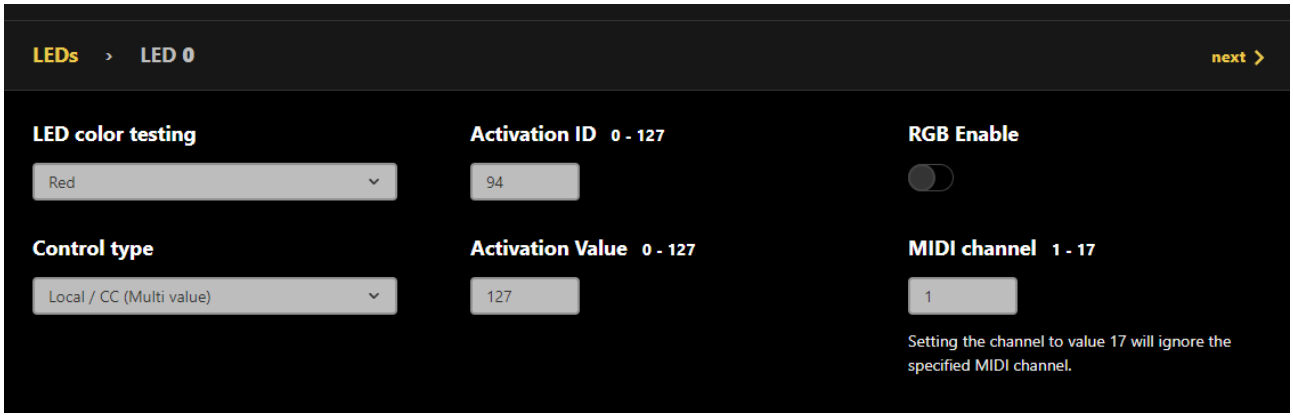
24 x Buttons & LEDs

- Momentary low profile buttons adressable to several events in the editor (toggle, preset switch, notes)
- Single LEDs adressable to several events like button activations, preset assignements
- RGB LED to indicate preset for example

NOTE: buttons & LEDs can be customized individually and LEDs (0-23) need to be adressed to specific buttons and their local MIDI ID to make em light up with the corresponding button. This can also be an external command, so the LEDs can light up with DAW commands for example over USB or DIN MIDI.

Internal button / led configuration:





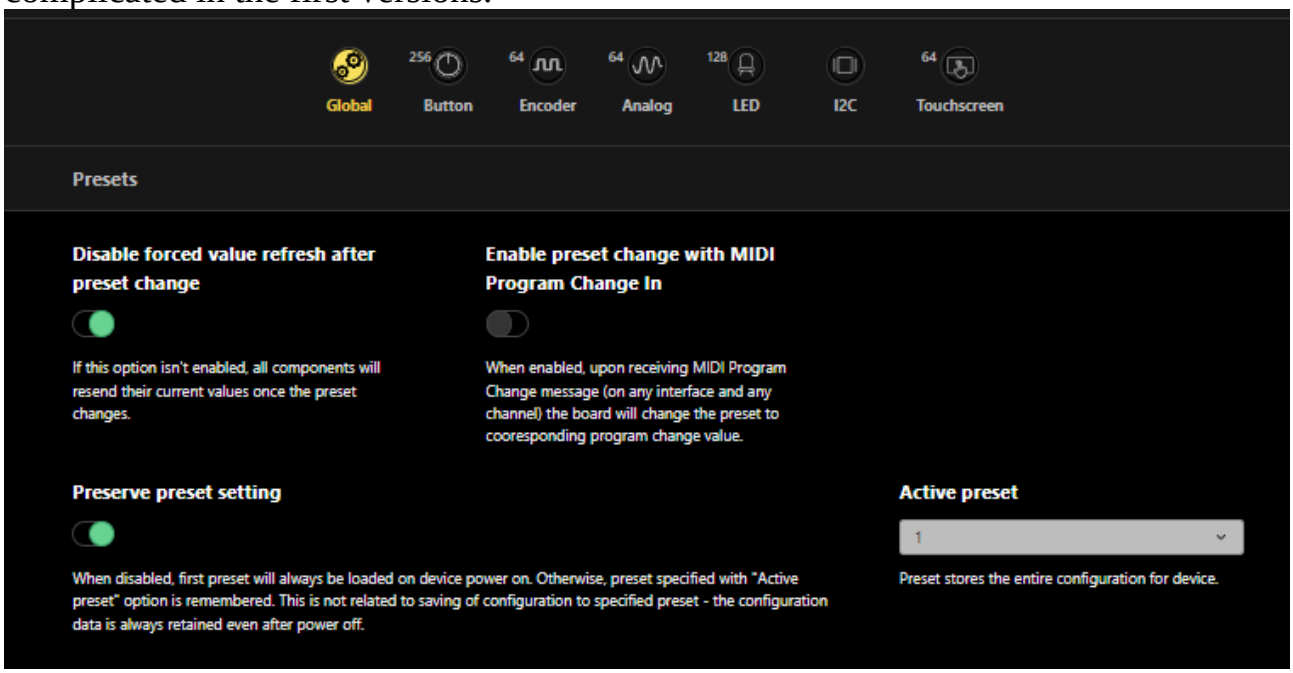
Choose color red, the correct activation id, local CC, activation value 127.

The RGB contains of 3 single LEDs and depending on which ones are activated the color changes. Their adressing is sadly confusing (24,32,40) but they need to be treated like 3 single leds.

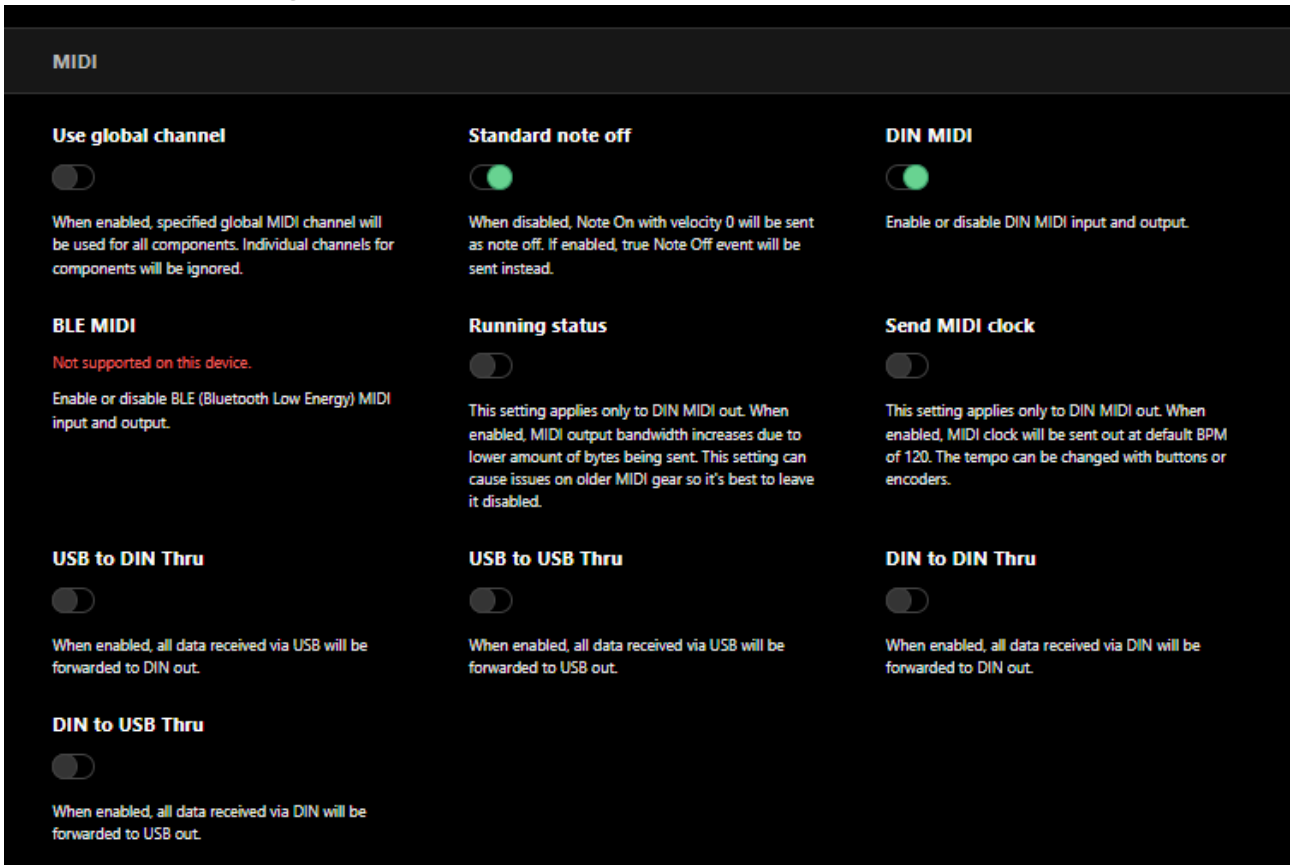
The Editor

The editor can be used over a webbrowser or desktop and provides an interactive overview over all adjustable aspects. The provided factory preset already covers almost all functions and customized adressing. It´s possible to store 10 different presets onto Mango.

If you´re just working with a DAW with MIDI learn function you most likely don´t need the editor. If it´s about adressing specific components to specific channels and IDs, things become a bit more challenging. We´ve been thinking a lot about the most senseful adressing of all components, but the result is: we´ve made things more complicated in the first versions.

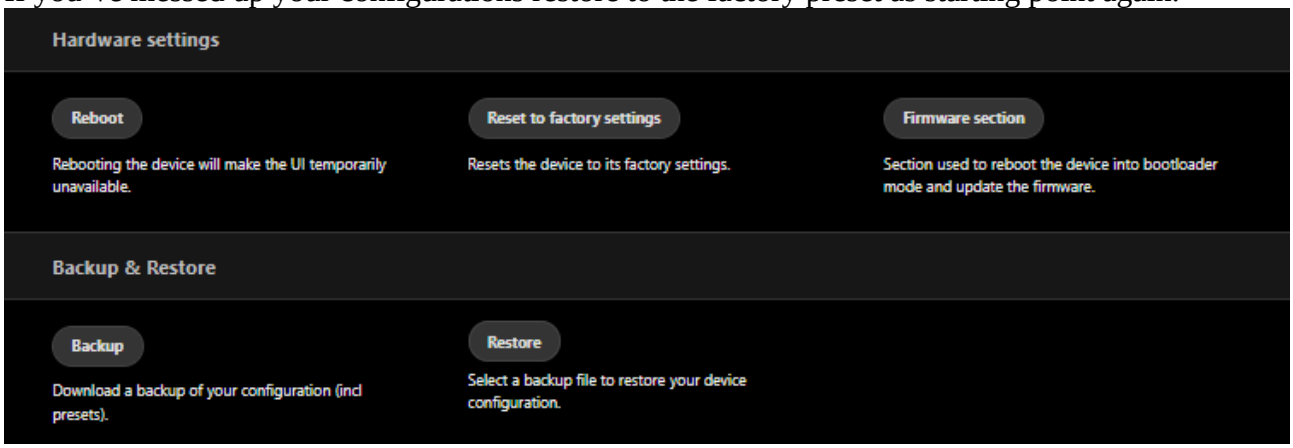


Global MIDI configurations



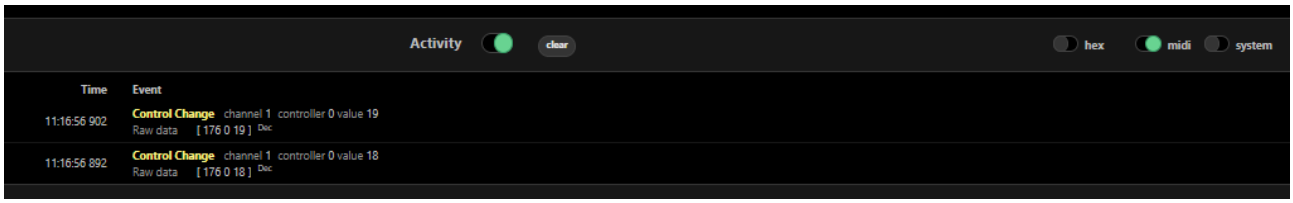
Backup & Restore presets

If you´ve messed up your configurations restore to the factory preset as starting point again.



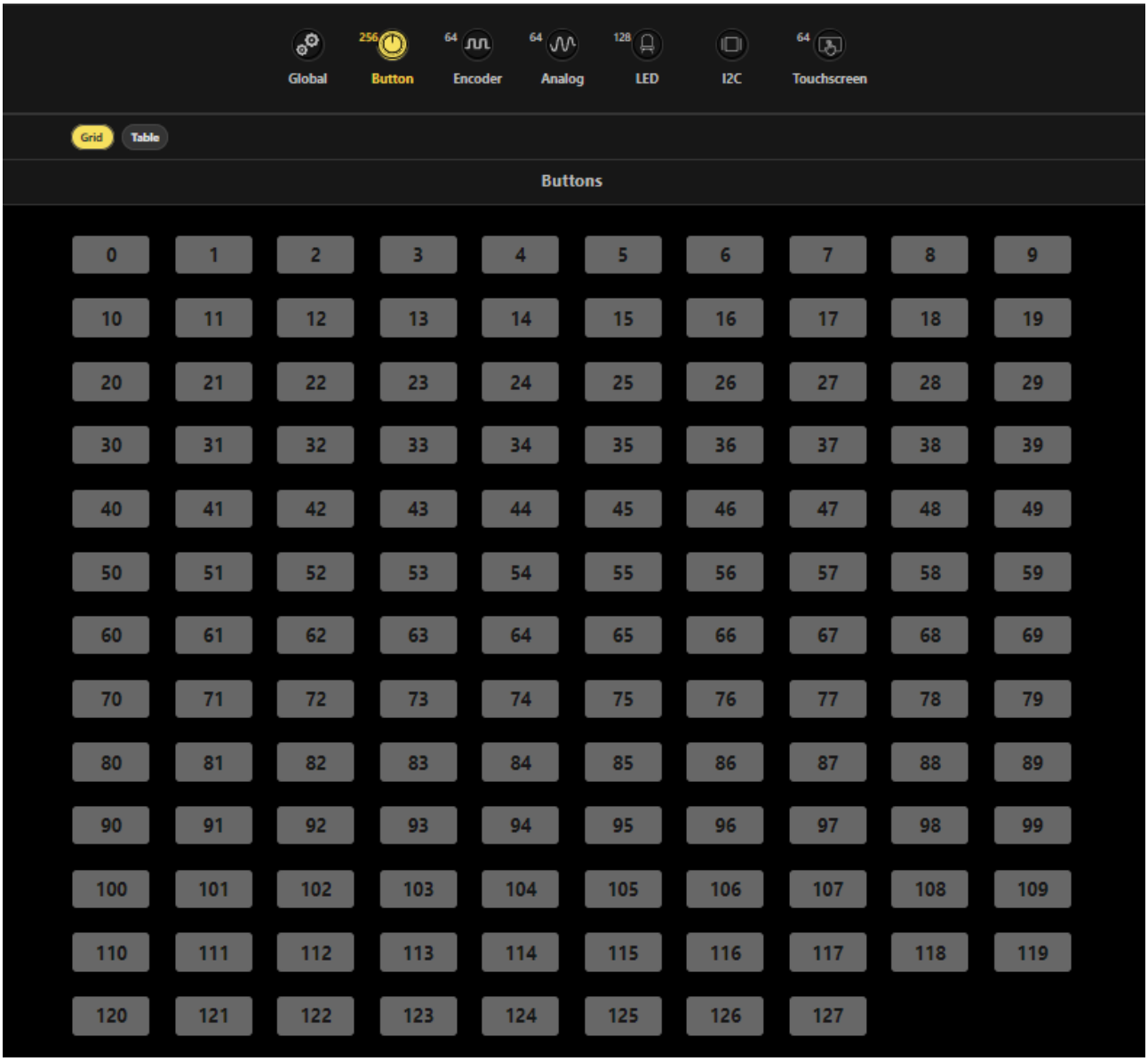
Activity Log

Realtime activity list



Grid View

Best view to find the correct buttons, faders and encoders in the editor. The correct number lights up on interaction.



In most cases you will need Notes or CC numbers to control other gear.

Typical configuration of Fader 1