The next generation: MVR mkII

Product Preview

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Motivation

Why do we «facelift» the device?

- The Dante Brooklyn II has become unavailable and will be replaced by more powerful (and expensive) Brooklyn III-
  If we have to pay more then we also want get something in return!

- The current FPGA is currently unavailable on the market. I managed to get a sufficient number (~200) of a compatible but more powerful device from a broker.
  We have more processing power so let's use it!

- Customer requirements have changed since the original design (i.e. MADI SFP has become more popular, ADAT less...)
  We have to do a redesign to let's take the chance to do it right!

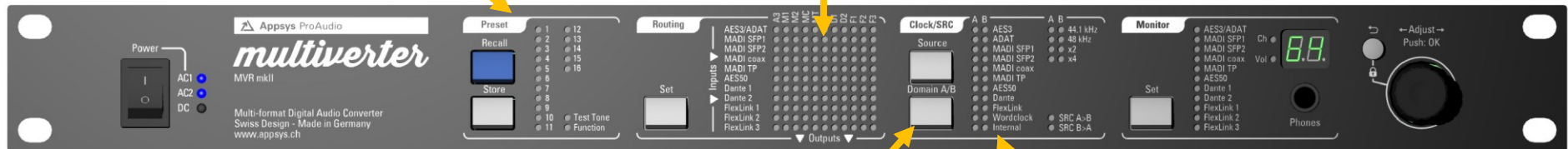Now is the time to bring this to hardware:
MVR mkII

New front panel

- **More LEDs (RGB) and buttons:**
  Basic operation (routing & SRC in 64ch blocks) completely possible from front panel
- SRC assignment & indication greatly improved from frontpanel

Extended Routing Matrix reflects
all 11x11 64ch-blocks

Number of presets
increased to 16

Extra button for clock domain assignment
(SRC I/O selection made easy)

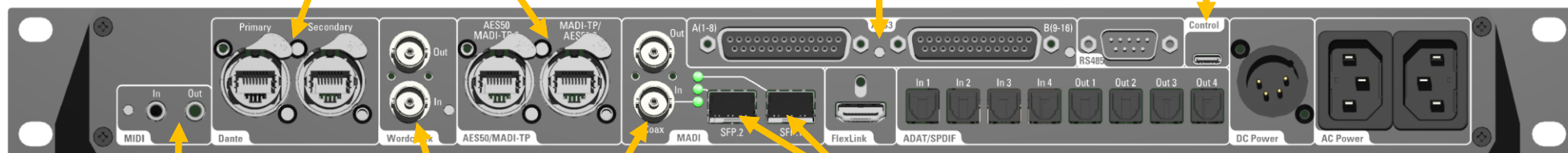Separate indicators for clock
domains A and B

New back panel

- **More interfaces**
- **Improved connectors**

Use new Neutrik
«Halo» connectors for
Cat5 connections

16x16ch AES3

USB-C for control

2x MADI SFP
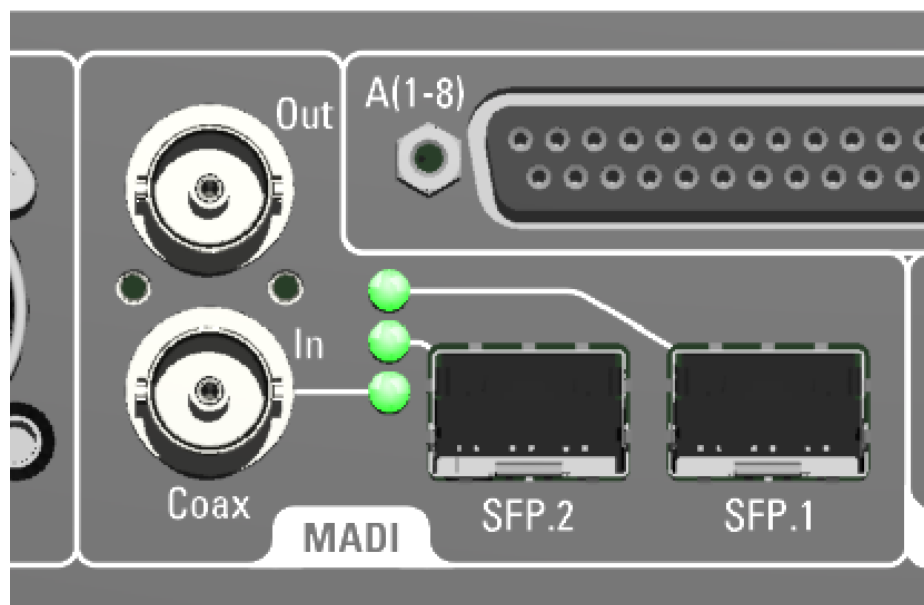(instead of 1x optical).
Now total possible:
- 3x coax
- 2x coax + 1x fiber
- 1x coax + 2x fiber

Full-metal BNC connectors

TRS connectors for MIDI

New features 1/7

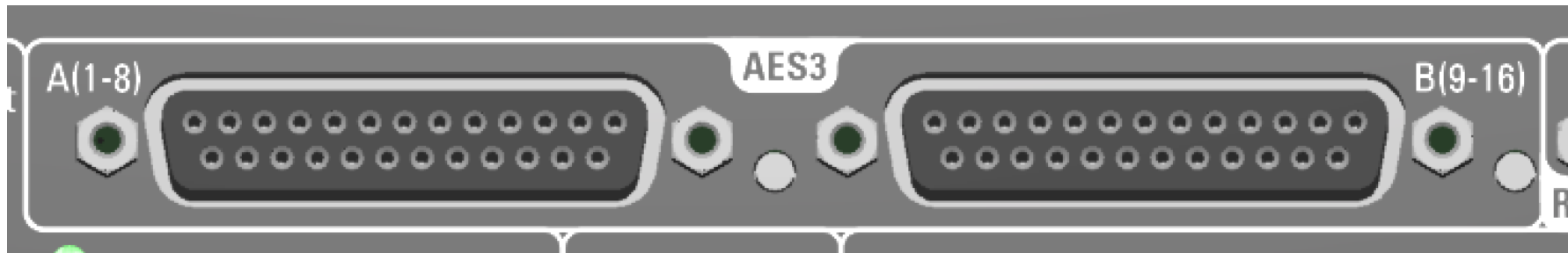## Dual MADI SFP replaces MADI optical: 192x192ch total!

Ships with Multimode SFP but accepts also others, e.g. **single mode fiber**, or **Ferrofish coaxial** SFP modules.
No vendor locks (Appsys policy) to bring the best, hassle-free customer experience.
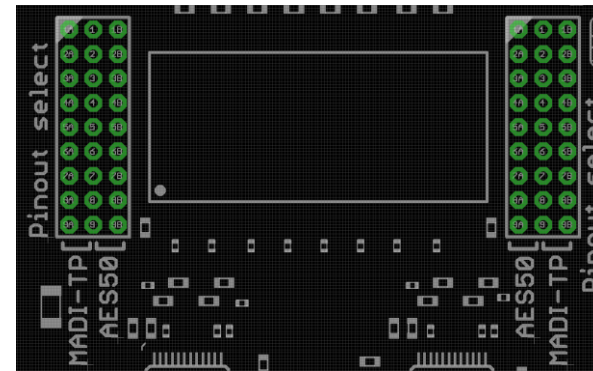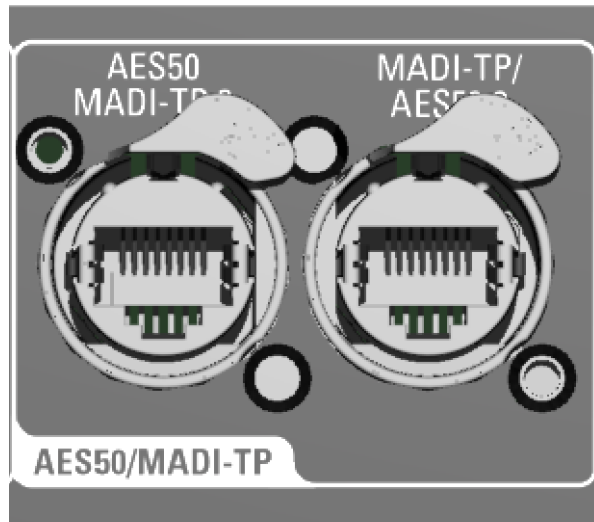
16x16ch of AES3

Most people don't use all 8 ADAT ports. While we cannot drop them altogether, we replace some by **often demanded AES3 ports** (two DB25 ports).

They will use provide the same internally jumperable pinout (Tascam/Yamahha) as the FLX-AES3.

New features 3/7

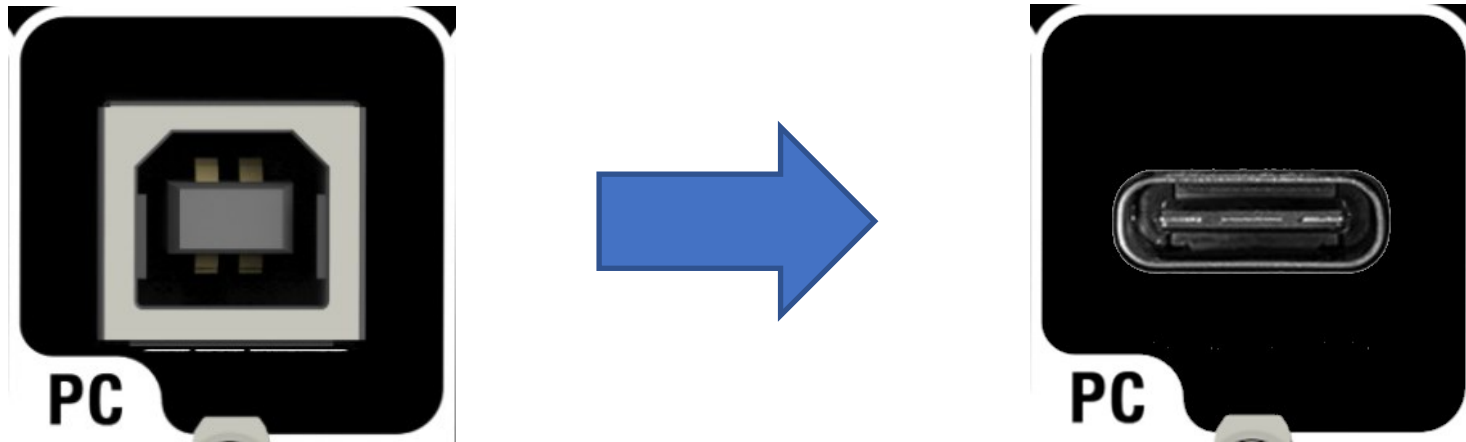## Jumperable pinout for AES50 and MADI-TP

Many people use these ports as 2x AES50 or 2x MADI-TP, which required a special «pinswap cable» on the «alien» port.

Now the pinout can be jumpered internally (similar to FLX-AES3) and enables always the use of 1:1 standard Cat5 cables.

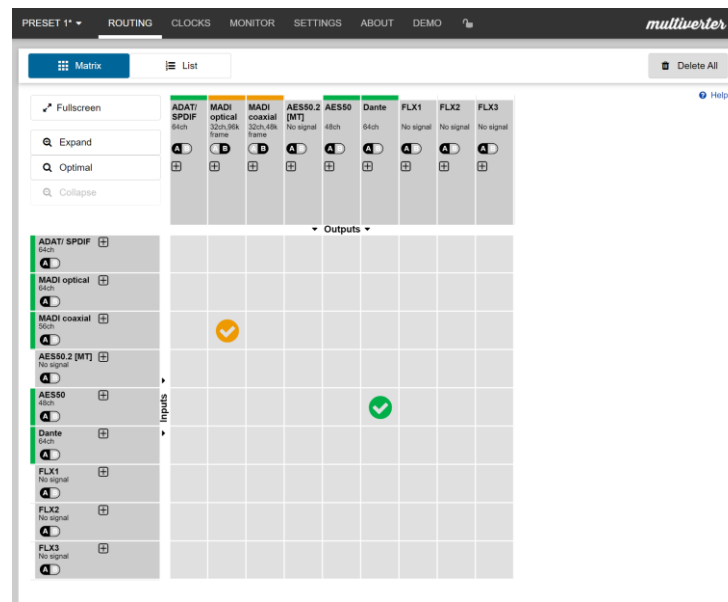# New features 4/7

USB-C instead of USB-B jack

The currently used USB-B jack is found on fewer devices nowadays.
This could be changed to «USB Type C» jack as found on most cellphones.
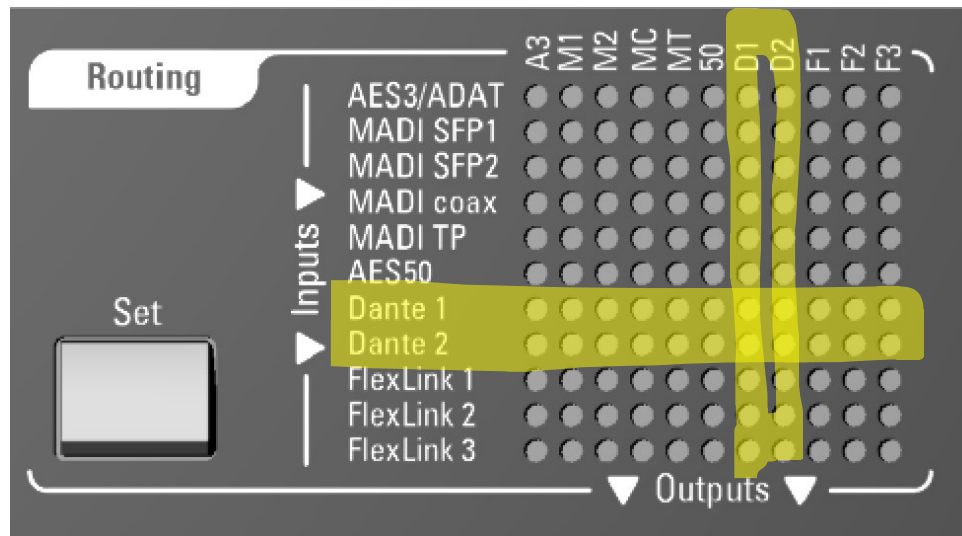
New features 5/7

Web control works also over USB (also backported to MVR-64)

- Especially in live applications, the Dante network is often **not** under control of the user, and connecting a computer for remote control is not allowed. Adding a dedicated network management port is considered too expensive/complicated.

- **Now remote control works directly from the browser via USB, no connection to Dante required!** (Limitations: does not work with Safari, requires live internet connection).

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Dante capacity increased to 128x128 channels @ 48k

Might include an extra unlocking fee by the customer

The hardware is capable of doing this, but both MVR firmware and the Brooklyn III modules firmware will need to be updated to handle this.
It is unclear from the Audinate side how exactly this will be handled, it might require a paid firmware update. At release the MVR will ship with 64x64ch enabled.

New features 7/7

Other improvements

New Feature

- Multi-color LEDs on front and back (same as Flexiverters) for more precise state indication.

- Ethercon uses new Neutrik Halo connectors:

- Full-metal BNC connectors for MADI and Wordclock: improved EMI and mechanical stability

- Software switchable termination for wordclock

- Improved THD+N (noise floor) for headphones

- Subtle artwork update on the frontpanel to better match Flexiverters

Pricing/Availability

- Design finished, PCB & enclosures will be ordered November 2022

- We managed to keep the MVR-64 price **constant since more than six years**.

- However, the current situation (component shortages/increased material costs, increased wages, expensive transport etc.) force us to increase the price moderately; **expect a ~15% increase** (final value not yet determined, will be communicated soon)

- First devices should ship ~Feb 2023.