# Klavis - NoDrain

## Negative to +5V Eurorack supply adapter

#### **Overview**

The Klavis NoDrain adapter is intended for Eurorack cases lacking a dedicated 5 volts supply. It draws its power from the negative 12 volts rail.

The NoDrain provides up to one amp of 5V while consuming only half as much current on the -12V rail. In very hot conditions (e.g. tightly closed case in a hot climate), there might be less current available due to the thermal protection of the circuit.

The NoDrain does its power conversion at megahertz frequency, way beyond the audible range. Its rugged design is protected against various possible troubles and mistakes.

More information is available on <a href="https://www.klavis.com/all-products/nodrain">https://www.klavis.com/all-products/nodrain</a>

# Do not use the NoDrain adapter if:

- There is already 5V available on your busboard (possibly from a passive regulator). Therefore, you must first disable/disconnect the existing 5V source or sources.
- The negative 12V rail is already supplying its maximum current to your case.
- You intend drawing more than 1 amp of 5V supply (less in hot conditions). In such case, you may use separate NoDrain adapters on multiple busboards as long as their various 5V supplies are not tied together.

### Installation

Lack of attention may result in damage to your equipment!

- 1. If you do not feel comfortable with the installation, don't attempt doing it yourself.
- 2. Disconnect the mains supply from your case.
- 3. Check/connect the cables that distribute the 5V between the busboards. When using more than one NoDrain, check and disconnect those 5V cables as needed.
- 4. Plug the NoDrain adapter on the busboard of your case, preferably in the connector closest to the 12V cables feeding that busboard.
- 5. Take care of the orientation: the stripe and/or -12 (minus 12) indications between the busboard and the NoDrain should match.
- 6. With the old version: be extra careful to not insert the NoDrain misaligned by one pin with the busboard connector! This is a frequently overlooked mistake.
- 7. Re-check everything from every view angle before applying the mains supply.
- 8. Be ready to promptly disconnect the mains in case something goes wrong.