

USB-C PWR inlet

Overview

The USB-C PWR inlet is a modern power solution for Eurorack modular synthesizers, allowing you to power your system using USB-C Power Delivery technology. This compact panel provides a convenient way to use power banks or USB-C chargers with your modular setup.

Package Contents

- USB-C PWR inlet panel
- Cables with Faston connectors
- 16-16 pin ribbon cable
- 2 wood screws (2.9 x 9mm)

Requirements

- USB-C charger or power bank that supports USB Power Delivery (PD) protocol with 20V output
- The power source must provide sufficient power for your synthesizer system (up to 100W maximum)

Installation

1. **Mount the panel:** Install the USB-C PWR inlet panel to your Eurorack case using the provided screws.
2. **Connect to power supply:**
 - Connect the included Faston connector cables from the USB-C PWR inlet to your Eurorack power supply's input terminals. **Check polarity!**
 - Connect the 16-16 pin ribbon cable between the USB-C PWR inlet and your power supply for voltage monitoring.
3. **Power connection:**
 - Ensure the power switch on the panel is in the OFF position.
 - Connect a compatible USB-C charger or power bank to the USB-C port on the panel.

Operation

1. **Powering on:**
 - Connect your USB-C power source to the panel.
 - The Input LED should illuminate, indicating successful USB-C connection.
 - Switch the ON/OFF switch to the ON position.
 - If your connections are correct, the +12V, -12V, and +5V LEDs should all light up, indicating proper voltage on all rails.

2. Status indicators:

- **Input LED:** Confirms USB-C power source is connected and communicating properly
- **+12V LED:** Indicates the +12V rail is functioning correctly
- **-12V LED:** Indicates the -12V rail is functioning correctly
- **+5V LED:** Indicates the +5V rail is functioning correctly

Note: If any of the voltage LEDs turns off, it indicates that voltage of PSU has dropped by more than 1V on that rail.

3. USB-A output:

- The front panel provides a 5V USB-A port for powering external USB devices like sequencers, MIDI controllers, or USB lamps.
- The available power depends on your power supply's +5V output capacity.

4. Powering off:

- Switch the ON/OFF switch to the OFF position before disconnecting the USB-C power source.

Troubleshooting

- **No LEDs light up:** Ensure your USB-C power source supports Power Delivery with 20V output and is properly connected.
- **Input LED is on, but voltage LEDs are off:** Check the connections between the USB-C PWR inlet and your power supply.
- **One or more voltage LEDs turn off during operation:** Your system may be drawing more power than your power supply can provide. Reduce the number of modules or use a higher-capacity power source.

Technical Specifications

- **Input:** USB-C Power Delivery (PD), 20V required
- **Maximum input power:** 100W (20V / 5A)
- **Output for synthesizer PSU:** 20V
- **USB-A output:** 5V (power depends on PSU capacity)
- **Panel dimensions:** 70mm x 40mm
- **Compatible with:** Konstant Lab Eurorack power supplies and other Eurorack power supplies supporting 20V input

Safety Precautions

- Only use USB-C chargers or power banks that support the USB Power Delivery protocol with 20V output.
- Always turn off the system before connecting or disconnecting power sources.
- Ensure proper ventilation around both the panel and your power source.



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