

VOLT55 ECOSYSTEM

Installation Manual

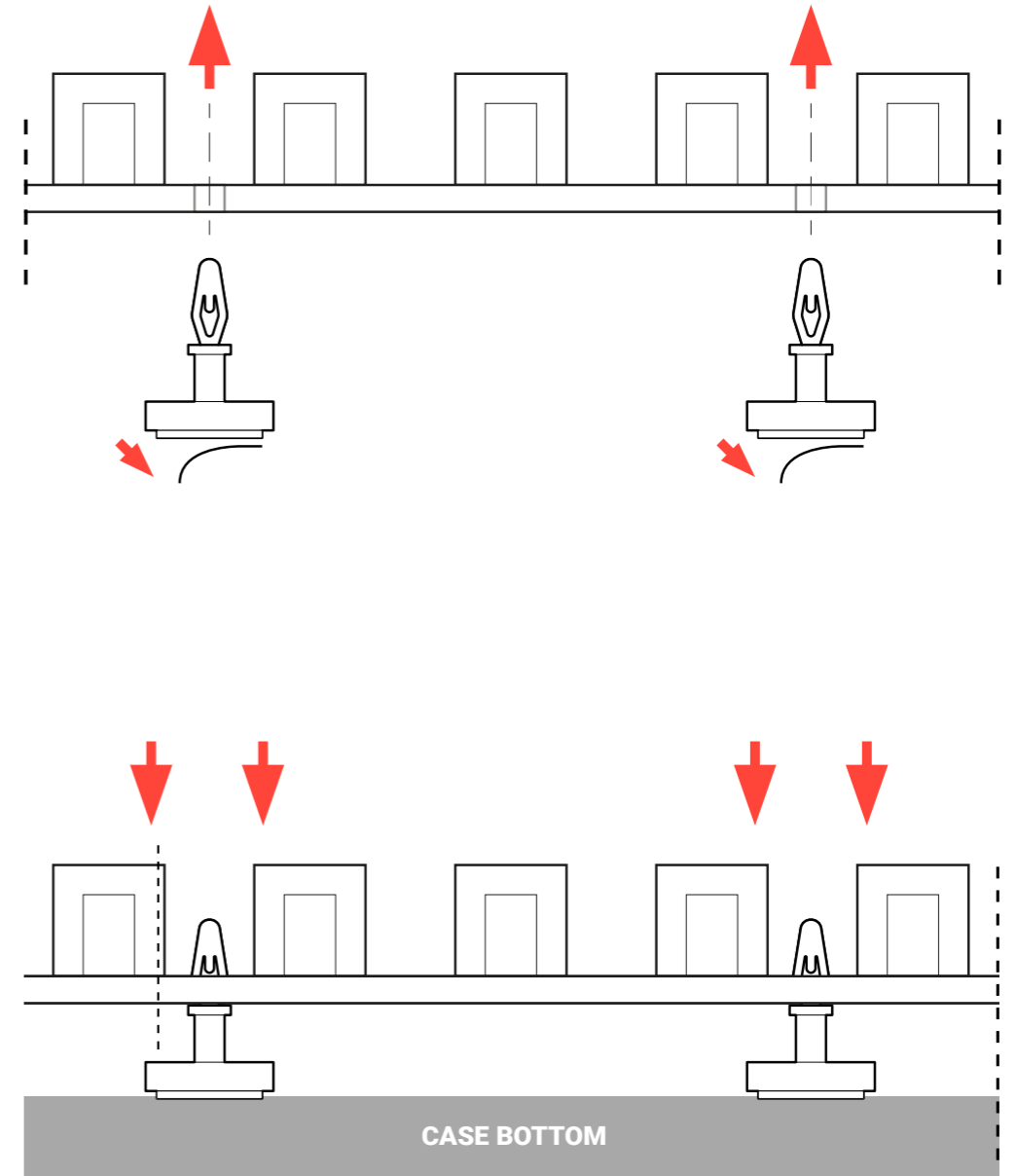
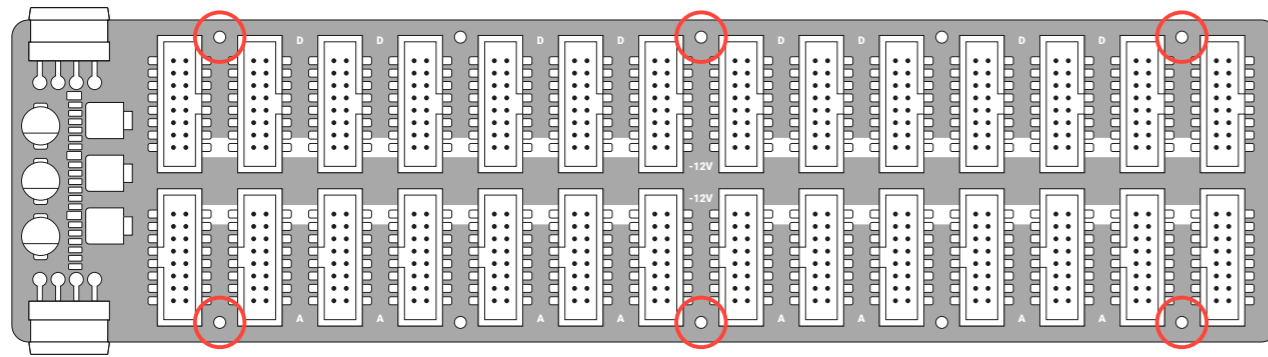
V1.0



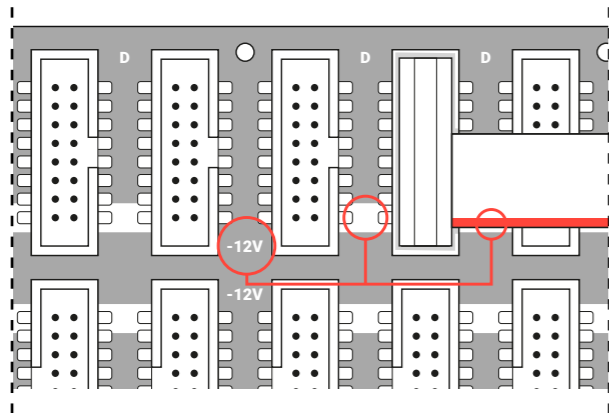
Installing VOLT55

With the VOLT Shield busboard

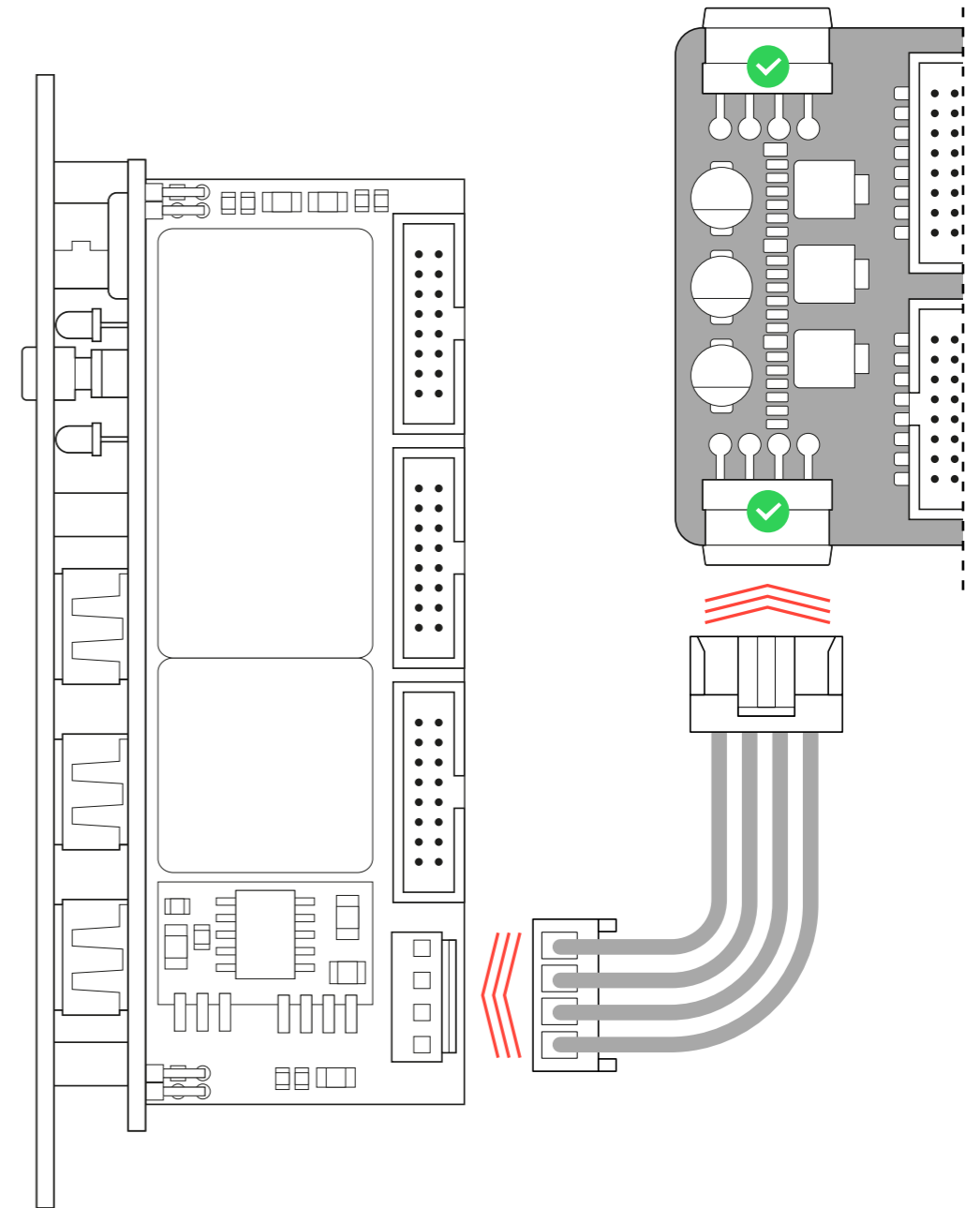
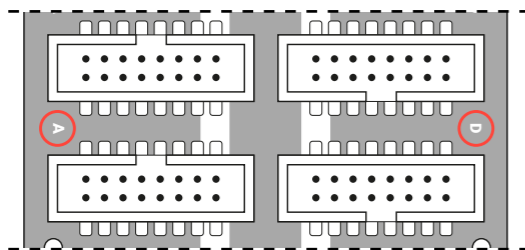
1. Do not connect the VOLT55 module to a power source at this point.
2. Mount the VOLT Shield busboard inside your case by inserting the 6 provided adhesive spacers from the backside of the board through the holes.
3. Peel the labels off the spacers and carefully place and press the assembly on the back of the case.



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2. Mount the VOLT Shield busboard inside your case by inserting the 6 provided adhesive spacers from the backside of the board through the holes.
3. Peel the labels off the spacers and carefully place and press the assembly on the back of the case.
4. Connect the included VOLT Shield cable to the VOLT Shield. Either connector can be used.
5. Connect the VOLT Shield cable to the VOLT55 module.
6. Install the VOLT55 module in your case.
7. Connect your modules to the VOLT Shield busboard using their ribbon cables. Make sure the red stripe aligns with the "-12V" marked side of the connector.



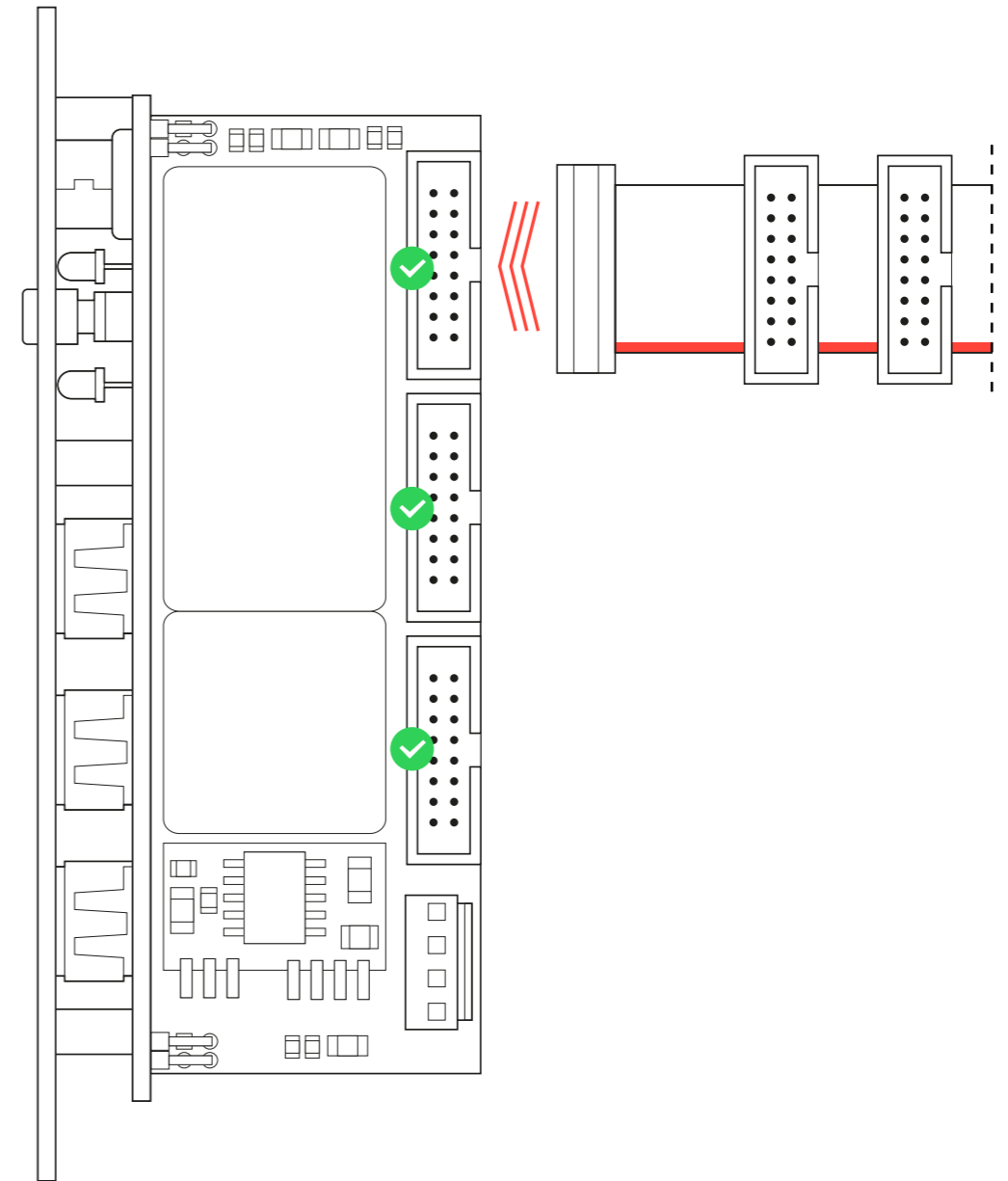
8. For noise free setup make sure to connect only analog modules to row "A", while row "D" is optimized for digital modules.



Installing VOLT55

With Flying Bus (not included)

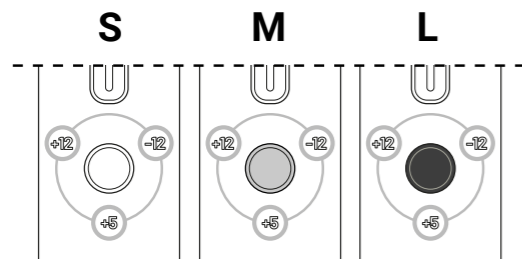
1. Do not connect the VOLT55 module to a power source at this point.
2. Connect the flying bus to any of the three 16-pin headers of the VOLT55 module. All 3 pin headers can be used at the same time. Make sure the red stripe is oriented to the bottom of the module.
3. Install the VOLT55 module in your case.



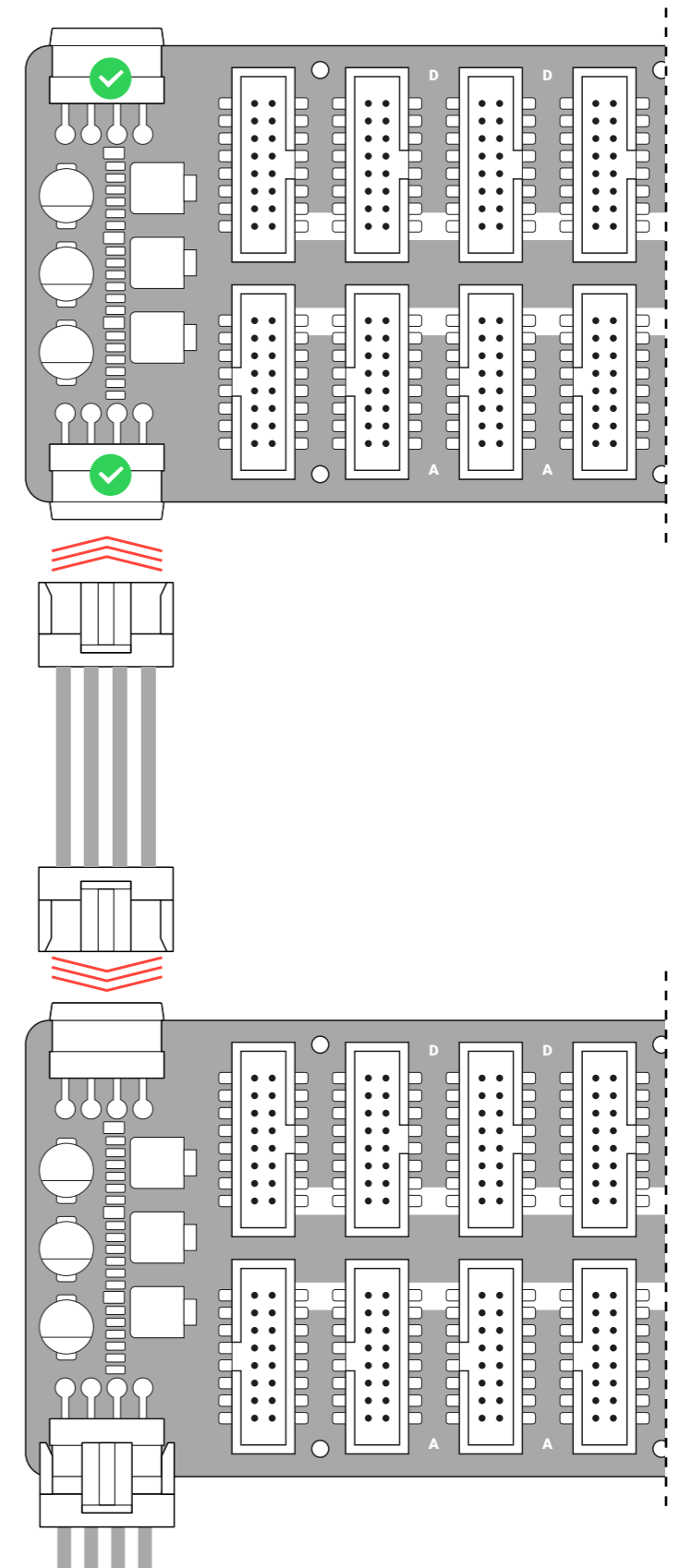
Installing VOLT55

Important Notes

- VOLT Shield busboards can be daisy-chained for more modules. Connect the additional VOLT Shield busboard to the available port on your first VOLT Shield busboard using the VOLT Shield cable. Any port can be used.
- The VOLT Shield and flying buses can be used at the same time.
- Modules can be directly connected to the 16 pin port on the VOLT55 module.
- Unlike the VOLT Shield, flying buses offer no noise filtering and are not optimized for digital modules. Do not draw more than 1A through a single flying bus.
- First-generation VOLT55 + VOLT Shield: A specific VOLT Shield cable is required for VOLT55 1st generation. If you did not request this cable, please contact Black Noise.
- We recommend keeping each rail under 80% of the following rated values.



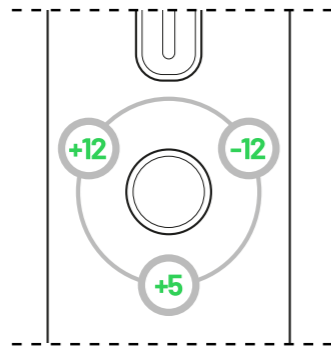
- **VOLT55-S** : +12V: 2500 mA, -12V: 1250 mA, +5V: 2000 mA.
- **VOLT55-M** : +12V: 4000 mA, -12V: 2500 mA, +5V: 2000 mA.
- **VOLT55-L** : +12V: 5000 mA, -12V: 2500 mA, +5V: 2000 mA.



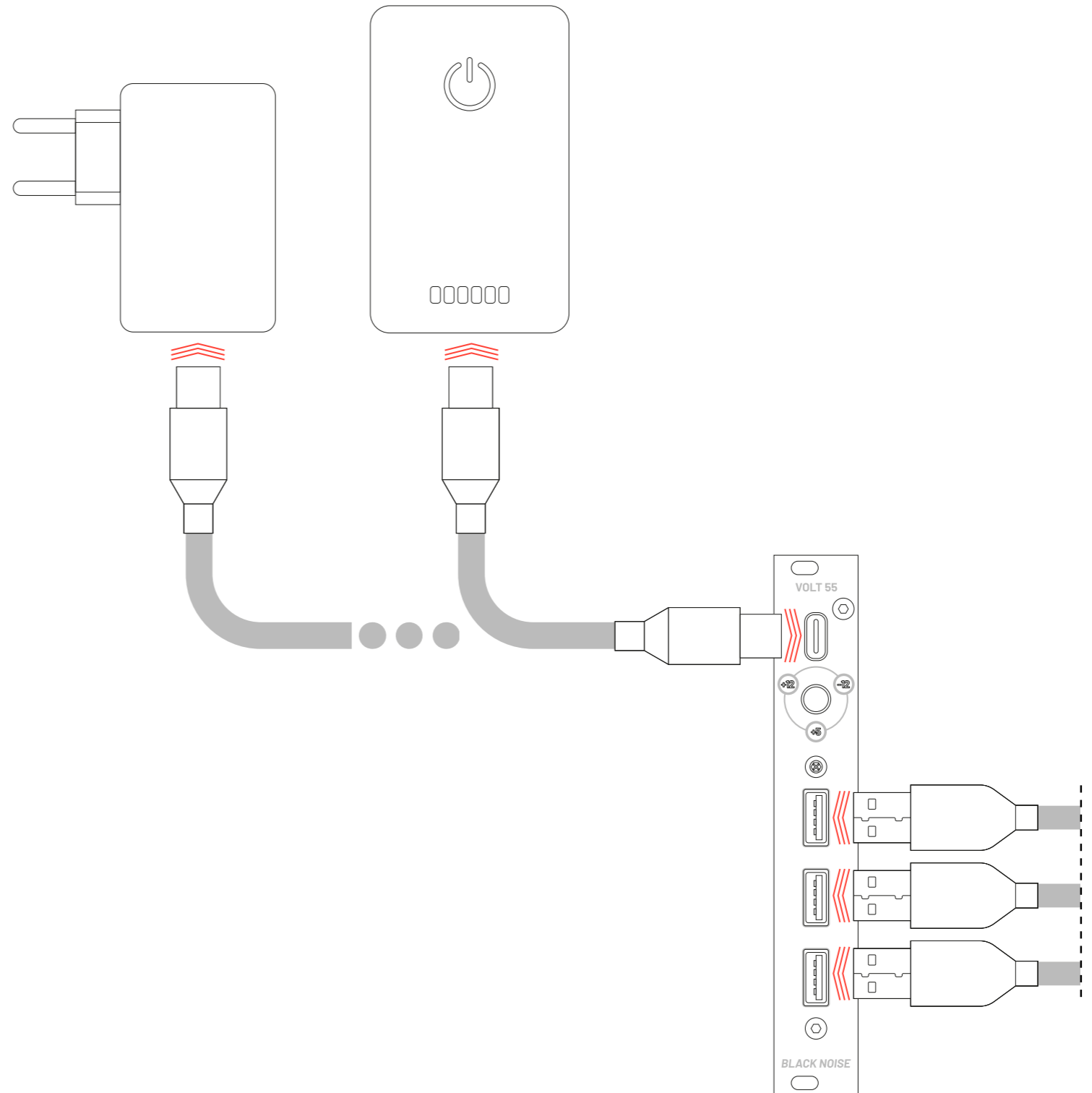
Powering VOLT55

Instructions

1. Make sure the VOLT55 module button is in the OFF position.
2. Connect the VOLT55 module to a USB-C cable.
3. Connect the cable to a power source: powerbank or power brick.
4. Turn on the VOLT55 module and confirm all three LEDs are on. Each LED indicates one rail operating correctly: +12V, -12V, and +5V.



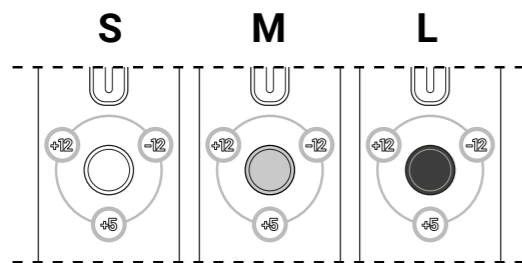
5. Optionally, connect USB-A powered devices to the VOLT55 module to power them.



Powering VOLT55

Important Notes

- The VOLT ecosystem requires a USB-C cable and power source compatible with Power Delivery 3.0, with the following minimum values:



- **VOLT55-S** : 65W, 20V, 3.25A.
- **VOLT55-M** and **VOLT55-L** : 100W, 20V, 5A.

- In case of doubt when sourcing an appropriate power source, please watch the VOLT power guide video available on our website.
- Due to the way the PD system works, connecting additional devices to your power source may cause brief power interruptions. To avoid this issue, use the USB-A ports on the VOLT55 module to power extra devices.
- The three USB-A ports are for power only, no data transfer. They share the +5V rail current with your modules.