

Starkrimson® Ultra Rev 3.0 Module Instructions

NOTES:

- **DANGER – HIGH VOLTAGE** – Do not work on the modules when they are on or being supplied power.
 - After turning off the power supply wait at least five (5) minutes before working on the module.
- Do not turn on the power to the module until all connections are properly made:
 - Power
 - Speakers
 - Analog Input
- Warranty – The 1-year warranty will be voided due to improper power supply connections. Please double-check all power supply connections before applying power. If you are uncertain, please contact me through www.orchardaudio.com/contact-us.

1. Connecting Power Supply

- If you are using the Orchard Audio SMPS1K2-SKU please follow the instructions in [this document](#).
- If you are using the Hypex SMPS1200A100 please follow the instructions in [this document](#).
 - For wiring the SMPS1200A100 to AC power please use Hypex's power supply manuals.
- If you are using your own power supplies please note, the module requires a total of 2 power supplies to operate. The power supplies are wired to terminal J1, on the board. The silkscreen on the modules details where each power supply connects.
 - +/-36V (+/-30 to 43V) - Amplifier Power Rails (16A minimum per rail to achieve 500W)
 - The absolute maximum voltage the amplifier will work with is +/-43.4V.

2. Connecting Earth Ground

- Connect earth ground to X2, also labeled as "EARTH" on PCB.
 - If your chassis is already connected to earth ground, connection to X2 is not required because all mounting holes are also connected to X2.
 - If there are multiple amplifier modules in the same chassis, connect earth ground to only one (1) module, preferable the one closest to the AC power entry.

3. Connecting Amplifier Output

- The amplifier output is on quick-connect tabs X1(+) and X3(-). They are both labeled "OUT."
 - Connect to speakers. – Both amplifier outputs are hot, do not connect either to ground or Earth.

4. Connecting Amplifier Input

- The amplifier has two analog inputs. The inputs must be used individually. **Do not** use both inputs simultaneously. The unused input must be shorted (see below).
 - Balanced (X7)
 - When not used, short BAL+ and BAL- terminals together using a short wire.
 - Single-Ended (X4)
 - When not used, short SE+ terminal to either GND terminal using a short wire.

5. Connecting 12V Trigger Input

- This connection is on X5 terminal block. Connection are labeled on the board. Amplifier is turned on when 12V is applied between TRGGR and GND. Leaving TRGGR open or connecting to GND will turn the amp off.
 - To enable trigger operation jumper J2 must be installed.

6. Module Protection Circuits

- Please review [this document](#), for an understanding of how the protection circuits operate.