

# **VOLT+ AMP** STAND ALONE AUDIO AMPLIFIER

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### VOLT + AMP

The TPA3116/18 class D amplifier IC is a leap in terms of audio quality.

Our board is a high quality implementation of the stock design.

- Using TPA3118 (better grounding of main IC)
- Anti-Pop circuit
- Bootstrap snubber mod
- Brand name components as per picture
- Radio avoidance switch (to reduce interference)
- PCB with extra copper (since on transient's current can spike to 5A)

#### Note that PCB comes in 2 flavors:

1. **Volt** is a shield and beneath it has connector that will plug into our DACs (Piano 1.1 and Piano 2.1). It has no RCA inputs. (Capacitance Multiplier can be added as a standalone board).

2. **Volt**+ is a standalone amplifier with RCA IN (stereo). In addition to everything that the Volt has, we have added a circuit in the power supply that will reject spikes and noise to about 60db. The name of the circuit is "Capacitance Multiplier". Please note that Class D amplifier needs a quiet PSU.

 $Volt+\ can \ be used with our DACs through the RCA input, as a standalone board.$ 







- This class D amplifier goes up to 2 x 50W Max
- The components used are specifically designed for high end audio devices (Würth Inductor, TI chipset, film capacitors and ± 1% thin film resistors)
- VOLT AMP boasts 4 output filters, 4 EMI Snubbers, 4 bootstrap capacitors and gain setting components
- We are using CM filter circuits in power section to reduce maximum ripples in power
- We are using 10K logarithmic Potentiometer for Volume control. Available with different Input connectors: 2 x RCA
- Comes in two flavors

# **Technical Specifications**

- Chipset: TPA3118D2
- Output: 2 x 50W (Max) into a 4 to 8-Ω BTL Load
- Class D Operation: 90% POWER EFFICIENCY
- SNR: 102dB
- Supply Voltage: UP TO 24V DC
- Board Size: LWH = 82.83mm\* 125.5mm \* 40.2mm
- Temp Range: -40°C to 85°C Ambient

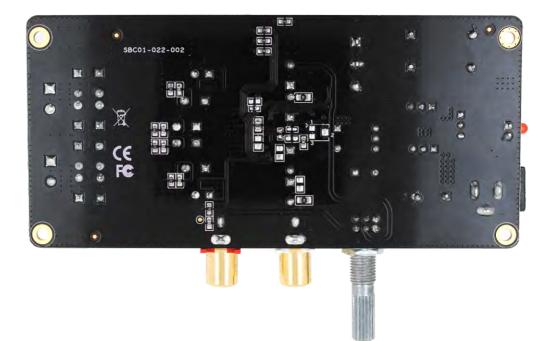








## **Bottom View**





#### PARTS LABEL OF VOLT + SHIELD

