SilentPower DC Blocker+

DC Induced Noise Reducer

Overview

The DC Blocker + blocks unwanted DC voltage from entering AV equipment, preventing transformer hum and improving audio clarity.

Key Features

- Improves transformer efficiency and reduces heat
- Benefit both linear transformers and SMPS
- Intelligently blocks over 1,000mV DC to eliminate transformer hum.
- Retains EMI shielding for continued noise suppression.
- Does not affect equipment safety.
- Globally compatible (90–250V).
- Designed for high-power equipment (continuous current rating: 10A).
- Compact design does not obstruct other connectors, sockets, or cables.

Applications

- **Elimination of DC Offset in audio signals**: DC blockers are used to remove unwanted DC components or DC bias in audio signals. Such DC offsets can cause speaker cones to be displaced from their neutral position, wasting energy and potentially causing distortion or damage. By blocking DC, these capacitors ensure that only the AC audio signal passes through, preserving sound quality and speaker health.
- **Prevention of Transformer Saturation in Amplifiers**: DC voltage present on the AC mains supply can saturate toroidal transformers commonly used in AV receivers and power amplifiers, leading to mechanical vibrations, noise, and degraded sonic performance. DC blockers installed on the mains line can remove this DC offset, preventing transformer saturation and improving amplifier performance.
- **Noise and Interference Reduction**: DC blockers help in filtering out unwanted DC voltage and high-frequency noise (RFI/EMI) from power supplies feeding audio and AV components. This reduces hum, hiss, and other noise artifacts, leading to clearer, more focused sound with improved bass definition and treble clarity.
- **Signal Coupling and Isolation**: In multi-stage audio circuits, DC blockers (usually capacitors) isolate different circuit stages by blocking DC while allowing AC audio signals to pass through. This prevents DC bias from propagating through the system and causing distortion or damage to subsequent stages.
- **Improving Power Quality for AV Systems**: The DC Blocker + improves the quality of AC electricity feeding AV systems by rebalancing the mains sine wave and filtering out DC and noise components. This enhances overall system performance and sound fidelity.
- **Use in RF and High-Frequency AV Communication Systems**: Specialised DC blocking capacitors are used in RF communication circuits, Bluetooth, 5G, infotainment, and microwave modules within AV systems to block DC voltages while efficiently transmitting AC signals with minimal loss.

Technical Specifications

- **Electrical characteristics**
  - Input/Output: Universal IEC
  - Zero DC Block Technology: Blocks incoming DC (up to 1200mV)
  - Voltage rating: 90-250V
  - Maximum current rating: ≤14A
  - Continuous current rating: 10A
  - Connectors: Hospital-grade
  - IEC connectors
- **Physical characteristics**
  - Dimensions: 75 x 46 x 32 mm (3.0" x 1.8" x 1.3")
  - Weight: 80 g (2.8 oz)
  - Limited warranty: 12 months

Contact Us

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