

PRIME POWER SUPPLY



OVERVIEW

Meridian Prime Power Supply can be used to power a range of Meridian products, including the Meridian Prime Headphone Amplifier, Audio Core 200 and Media Source 200. The addition of Prime Power Supply to these components provides a significant enhancement in their performance – it's like supercharging your car's engine.

PRODUCT HIGHLIGHTS

High current, very low noise power supply delivers enhanced performance from a range of Meridian products and other devices requiring a high-quality 12V power supply.

- Linear power supply design inspired by latest 800 Reference Series supply.
- High-mass, low-profile, low magnetic field, hand-assembled toroidal transformer with integral magnetic screen, plate-mounted to shield electronics from noise.
- High-quality latching 3-pin mini-DIN high-current power output connectors for reliable connection.
- Power input filtering.
- Dual-stage regulation on all outputs, using very low noise linear regulators.
- Multiple capacitors for noise filtering; Nichicon audio-grade reservoir capacitors.

USER FEATURES

- Connects multiple devices to a single Power Supply: single wall connection minimises clutter.
- 5 x 12V 500mA outputs for Meridian components; USB 5V 1A output with USB input for audio pass-through – drives Explorer and Explorer 2 and Prime Headphone Amplifier.
- Elegant and durable metal enclosure, double-skinned for lower noise, which offers the distinctive Meridian look with no visible mounting screws.
- Delivers enhanced performance from a range of Meridian products including the Meridian Prime Headphone Amplifier, Audio Core 200 and Media Source 200.
- Connects multiple devices to a single Power Supply: single wall connection minimising clutter.

TECHNOLOGIES

TRUE TOROIDAL TRANSFORMER

At the heart of the Prime Power Supply is a hand-assembled true toroidal transformer: a high-mass, low-profile, low magnetic field design. In addition to its integral magnetic shield, it's mounted on a metal plate to shield electronics from noise.

MULTI-STAGE REGULATION

Each output on the Prime Power Supply includes multi-stage regulation using a total of six extremely low noise linear regulators. Both the 12V and 5V USB outputs include pre-regulators prior to the output regulators. Even though the 12V outputs are rated at just 500mA, they utilise heavily over specified 5A linear regulators, selected by a rigorous evaluation process, including extensive listening tests.

LOW DROPOUT (LDO)

The USB supply features a new high-efficiency low-dropout (LDO) linear regulator design that features less than $5\mu\text{V}_{\text{rms}}$ output noise in the range 10 – 100k Hz.

VERY LOW NOISE REGULATOR

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REAR PANEL LAYOUT

CONSTRUCTION

Meridian Prime Power Supply echoes the design elements of any other Meridian product, built into an elegant, compact bead blasted metal case designed by Allen Boothroyd that echoes the G Series, with no visible screws, and double-skinned for lower noise.

- Use of this special low-noise, highly regulated linear power supply will help to deliver the highest possible audio performance from these and other systems requiring 12V dc power at up to 500mA by keeping AC noise away from sensitive audio circuitry.
- Handmade in the UK.

SPECIFICATION

INPUTS	<ul style="list-style-type: none"> • 1x IEC C3 3-pole connector • 1x USB input for audio pass-through
OUTPUTS	<ul style="list-style-type: none"> • 5x latching 3-pin mini-DIN connectors providing 12V dc at up to 500mA • 1x USB output for powering external devices, delivering 5V dc at up to 1A. Passes USB data supplied via the pass-through input • Outputs include two stages of regulation
DISPLAY	<ul style="list-style-type: none"> • Illuminated power button shows blue in standby, white when active
CONTROLS	<ul style="list-style-type: none"> • Front panel power button • Nine front-panel keys, five of which are context-defined • Large knob for volume control and muting • IR remote control (included) • USB connector for serial control and maintenance
DIMENSIONS/WEIGHT	<ul style="list-style-type: none"> • HEIGHT: 50mm [2.0in] • WIDTH: 160mm 6.3in] • DEPTH: 150mm [5.9in] • WEIGHT: 1.6 kg (3.5 lbs)
POWER	<ul style="list-style-type: none"> • Available models include 110–120V ac and 230V ac • Consumption 60W max