



DS450M

Monaural Power Amplifier

The DS450M mono amplifier adds a new level of performance and flexibility to our Definition Series of amplifiers. Providing abundant power, dynamics and control in a compact chassis, the DS450M rounds out the DS amplifier lineup.

There are several reasons to choose the DS450M over its stereo counterpart. The most important is performance-based: a monaural amp simply produces a bigger, more spacious soundstage. Also, we were able to fit a much larger power supply in the chassis. Then there is the issue of size: the DS450M is smaller and easier to situate than the hefty DS450 stereo amplifier. In addition to its reduced height, the DS450M mono is 4.15 inches (10.5 cm) shallower, allowing it to fit in a much tighter cabinet space. And, lastly, the DS450M is also perfect for multi-channel home theater systems when you only need one more powerful and dynamic amplifier channel. Rated power is 450 watts into 8 ohms.

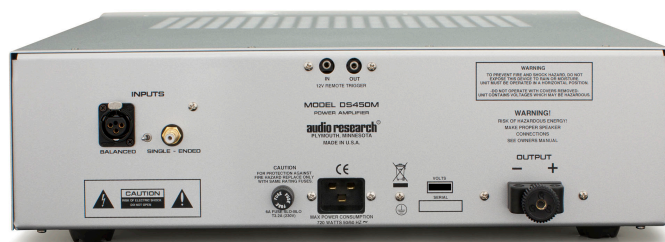
The DS450M has the same chassis size as the DSi200 and DS225, and continues the same design philosophy of other Definition Series amplifiers. Our proprietary “hybrid Class D” all-discrete *analog* switching-mosfet output technology is combined with an enormous linear analog power supply, yielding tremendous speed and power delivery in a compact, cool-running chassis. This remains a distinctive Audio Research design from the ground up, forsaking the use of prepackaged “OEM” solutions common to other switching amplifiers. Each DS450M idles at only 55 watts. One major enhancement that allows a pair of DS450M's to offer even higher performance than a DS450: the energy storage of a pair of DS450M monoblocks is 1,368 joules, an increase of 62% over the DS450. The immense power supply will jump-start the most inefficient speakers when the music demands it.

The DS450M is a fully balanced design with both XLR balanced inputs and RCA single-ended inputs. The rear panel features a dual Cardas patented speaker binding post and two 12V triggers. A 12-gauge detachable power cord with a 20A IEC connector is included. In addition to the standard all-silver version, the DS450M is also available with a black front panel, black handles, and black top cover.

The DS450M builds on the foundation of its siblings, with great resolving power, pinpoint imaging, and a musicality that is immediately involving. The enormous power supply provides an authority and sense of dynamics that are breathtaking with whatever music you choose. Whether it is used in the most refined music system or the most over-the-top video system, the DS450M will provide a level of performance and value that is startling.

Like all Audio Research products, the DS450M is made by hand in our Plymouth, Minnesota facility. Connections are hand-soldered, not press-fit nor wave-soldered. All metalwork, boards, transformers and major parts are American-made and sourced locally. We take a great deal of pride in our workmanship, and so will you.

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SPECIFICATIONS

POWER OUTPUT: 450W into 8 ohms (650W into 4 ohms), 1% THD.

POWER BANDWIDTH: (-3dB points) 5Hz to 45kHz into 8 ohms.

FREQUENCY RESPONSE: (-3dB points at 1W) 5Hz to 45kHz into 8 ohms.

INPUT SENSITIVITY: 2.9V RMS for rated output (26dB Gain) single-ended or balanced.

INPUT IMPEDANCE: 150K ohms single-ended, 300K ohms balanced differential.

OUTPUT POLARITY: Non-inverting from single-ended input. Balanced pin 2+ (IEC-268).

OUTPUT REGULATION: 0.02dB 8 ohms loaded to open circuit (Damping factor 440).

OUTPUT CURRENT: ~35 amps peak at protective shutdown.

SLEW RATE: 5 volts/microsecond (20% maximum duty cycle).

RISE TIME: 8.0 microseconds.

HUM & NOISE: <300 microvolts RMS (105dB below rated output IHF A-weighted).

POWER SUPPLY CAPACITANCE: 176,800 uF total 684 Joules.

POWER REQUIREMENTS: 100-125VAC 60Hz (200-250VAC 50Hz) 550 watts at rated output (450W into 8 ohms), 700 watts at 650W into 4 ohms, 700 watts maximum, 55 watts idle.

DIMENSIONS: 19" (48 cm) W (standard rack panel) x 5 1/4" (13.3 cm) H x 14 1/4" (36.2 cm) D (front back panel). Optional handles extend 1 1/2" (3.3 cm) forward of the 3/8" thick front panel. Output connectors extend 1 1/2" behind rear panel.

WEIGHT: 37.2 lbs. (16.9 kg) Net; 43.3 lbs. (19.7 kg) Shipping.

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