heatsinks below  $40^{\circ}$  centigrade, a huge surface area is required for heat dissipation. The AMS50 has a surface area of six square metres, which results in a temperature rise of about  $35^{\circ}$  centigrade. If another power amp claiming to be Class A has a similar power specification, but has smaller or cooler heatsinks then, no matter what claims may be made, it cannot be pure Class A. The laws of physics dictate the relationship between standing current, surface area and the amount of heat that an amplifier will create.

### **Total linearity.**

The AMS50 has excellent load driving ability and an outstanding stability margin. Because of this, it will drive any loudspeaker with ease and deliver a linear, low distortion, uncoloured sound.

### Sound quality.

When the AMS50 pure Class A power amp is partnered with a Primo preamp, the sound quality is exceptional. The basic system tonality is similar to a pure Class A tube system, but with no colouration or distortion. Its transient delivery is excellent. The sense of sound stage is positively tactile.

Together, the Primo and AMS50 take you right into the heart of the musical performance. The duo is incredibly fast and quick. Transients have no overhang. Small dynamics are handled with effortless elegance. Uniting the AMS50's characteristics of a sweet, clear, uncoloured sound with its excellent transient performance gives another dimension to hi-fi performance.

### Design and build quality.

We have spared no expense or effort to make the AMS50 beautiful, understated and as well-built as possible. The three-part front panel is machined from solid, milspec aluminium billet with an exclusive titanium G2 finish, in either silver or black. The badge is made from medical grade stainless steel. The top and back are machined from solid metal and finished to the highest standard. The heatsinks are custom, fine line extrusions, made to our specification, for maximum efficiency.

In both its appearance and its build quality, we have tried our best to make the AMS50 timeless and enduring - awesome to hear and fulfilling to own.



# **AMS50** Power Amplifier by Musical Fidelity Specifications

Output

(17dBW).

70°C.

**Power** 50 Watts per channel into 8 Ohms

Voltage RMS 20 Volts 20 Hz to 20kHz.

100 Watts per channel into 4 Ohms.

Voltage peak-to-peak 58 Volts.

Output devices 12 per channel.

Damping factor 190.

**Balanced** line input

unweighted.

weighted.

+0, -0.4dB.

**Connections** 

RCA connectors.

plug/binding posts.

socket.

Current peak-to-peak 100 Amps.

Thermal cut out Internal temperature

THD + Noise 20Hz to 20kHz < 0.006%

Input sensitivity for 50 Watts 650mV.

Frequency response 10Hz to 40kHz,

Line level inputs One pair line level XLR

(balanced) connectors. One pair line level

Speaker outputs Four pairs, 4 mm banana

Trigger input 3.5mm/1/8" mono jack

**Trigger level**  $\pm 5V$  to  $\pm 12V$ .

Signal to noise ratio >110dB 'A'

Input impedance 50k Ohms.

#### **Power requirement**

Mains voltages 115/230V AC, 50/60Hz (factory pre-set). Consumption 600 Watts maximum into 8 Ohms.

#### Weight and dimensions

Unit only, unboxed 60 kg (132 lbs). In shipping carton 65 kg (143 lbs). Height 325 mm (12<sup>3</sup>/<sub>4</sub> inches) inc. feet. Width 483 mm (19 inches). Depth 460 mm (18<sup>1</sup>/<sub>4</sub> inches) front to back, terminals included.

#### Front panel finishes

**Titanium G2 silver** with black centre panel and silver badge. **Titanium G2 black** with a silver badge.

#### Standard accessories

IEC type mains led (10-Amp type).

Musical Fidelity reserves the right to make improvements which may result in feature or specification changes without notice.

# **MUSICAL FIDELITY**

**Musical Fidelity Limited** 

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11/09/e&oe

# **AMS50** Power Amplifier by Musical Fidelity





## Pure Class A. High current. Total system linearity. Fully balanced dual mono.

The AMS50 power amplifier is the fruit of thirty years of research within Musical Fidelity, into the design, development and manufacture of very high performance power amps.

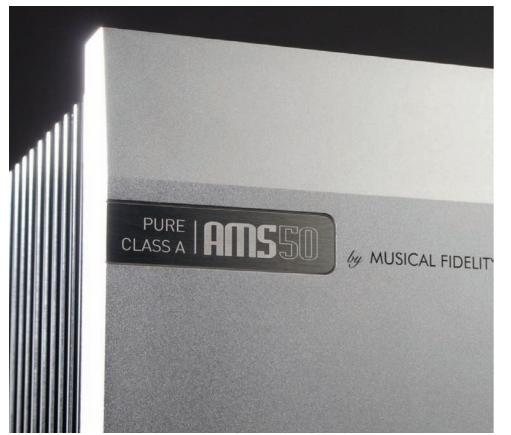
The sound quality of the AMS50 is delicate and subtle, with excellent transient attack and power delivery. The AMS50 is also unconditionally stable into any known load.

With its visual aesthetic of elegant understatement, and peerless build quality and materials, the AMS50 gives deep and lasting satisfaction. The sound quality gets to the heart of the music. The AMS50 is designed to feed your soul by satisfying your senses.

# Design background.

The AMS50 pure Class A, dual mono power amp is the culmination of our quest to make ultimate amplifiers. Over the past three decades, we have designed every type of amp imaginable: tubes, hybrid, mosfet, bipolar, Class A, ultra high power, single ended, bridged and balanced. Along the way, we have made more Class A amplifiers than any other manufacturer, probably more than all of them put together. Why all this activity? Because the pursuit of perfection in sound quality drives us.

We are fully committed, as a company, to the goal of purity and accuracy of musical reproduction. That is why Musical Fidelity exists. We continually research and probe the limits of every conceivable circuit design, to achieve our



# **AMS50** Power Amplifier by Musical Fidelity



passion of recreating music in the home with true high fidelity.

# A new approach to Class A power amplifiers.

The AMS50 pure Class A power amp combines the elements of our Class A series of amplifiers and our very high powered Titan circuit configuration.

We have no doubt that ultimate musicality is given by Class A power amps. *Pure* Class A power amps are even more extraordinary. However, the high standing current required for pure Class A generates a lot of heat, and enormous heatsinks are required to dissipate

it. Because the AMS50 is genuinely 8 Ohms pure Class A, it requires massive heatsinks and, as a result, the whole amplifier is massive.

But pure Class A is only part of what makes the AMS50 special. We learned a great deal as we developed the Titan power amp, with its fully complementary, balanced, bridged circuit. The Titan circuit configuration gives a tactile, 'You are there' quality, unlike almost any other amp in existence. The Titan concepts also contribute to the sound of the AMS50.

The AMS50 pure Class A power amplifier combines the benefits of pure Class A performance with the Titan's extraordinary sonic qualities. This fusion of two, opposite, poles of perfection is a completely fresh approach to a pure Class A power amp. As far as we are aware, there has never before been a 50 watt *pure* Class A, complementary, fully balanced,

The AMS50 is a genuinely dual mono amp. Inside the massive housing, there are two completely separate, mono amplifiers. Some say that the AMS50 is surprisingly big for its 50 watt power rating and

The AMS50 pure Class A power amp is the absolute minimum size possible for a *pure* Class A power amp. Its standing current is pure Class A, 50 Watts, 8 Ohms. This generates a fixed amount of heat. To keep the temperature rise of the



bridged amplifier. This circuit configuration gives substantial technical benefits in terms of power supply noise rejection and superior technical performance over a very wide bandwidth.

The AMS50's distortion is less than 0.005% wide band. Even at 50kHz (a ridiculous measurement for a power amp) the distortion hovers around 0.008%. The AMS50 noise ratio is outstanding. Even on a 97dB sensitivity loudspeaker, it is inaudible unless you have your ear pressed to the tweeter. As far as we know, this is not a normal listening position!

Some say that the AMS50 is surprisingly big for its 50 watt power rating and there are other, smaller, Class A amplifiers with similar or greater power.