the Primo's noise performance, which is outstanding.

Thanks to the PSU design and subtle circuit, the Primo's tube life will be around 10,000 hours (subject, of course, to the vagaries of tube manufacture).

# Sound quality.

The Primo's sound has a free, open quality, with a huge, wide, deep image. The music emanates from a black velvet background and dynamics are delivered incredibly quickly. More important, perhaps, there is no overhang after the dynamics. They're there and then they're gone.

In a way, small dynamics convey more of a sense of reality than the big, slam ones. The Primo excels in this area. Coupled with the exquisite, sweet sound is the sense of speed and instantaneous realism that marks out true high end.

# Design and build quality.

We have spared no expense or effort to make the Primo as beautiful and as well-built as possible. The front panel is machined from solid milspec aluminium billet with an exclusive titanium G2 finish, in either silver or black. The Primo's badges are made from medical grade stainless steel. The top and sides are machined from solid and finished to the highest standard. Even the Primo's remote control is beautifully engineered, with both the casing and pushbuttons machined out of solid aluminium.

In both its appearance and its build quality, we have tried our best to make the Primo timeless.



# **Primo**Reference Standard Tube Preamplifier by Musical Fidelity Specifications

Total Harmonic Distortion plus noise, 20Hz to 20 kHz 0.0035% typical Signal to noise ratio >119dB Input sensitivity for full output 8V Input impedance 150K ohms CT (centre-tapped)
Overload margin 30dB
Channel separation105dB
Output impedance 600 ohms
Frequency response 5Hz to 50KHz

Maximum output voltage 32V rms

**Power requirement** 115/230V (factory preset) or 100V only. Operating: 120 W maximum. Standby: <20W.

#### Main unit connections

-0.5dB

**Line level inputs** Five pairs line level RCA connectors. Five pairs XLR (female) balanced line level inputs.

Line level outputs One pair RCA preamp line outputs (level controlled by volume). One pair XLR (male) balanced outputs. Tape outputs One pair RCA tape line outputs (fixed level).

**Trigger input** 3.5mm mono jack socket  $\pm 5$  to  $\pm 12$  V.

**Trigger output** 3.5mm mono jack socket +5 to +12V (tip +, sleeve –).

Power input Three-pin IEC from mains.

#### Accessories

**Mains lead** 10 Amp IEC type (supplied). **Remote control** PRIMO Preamplifier remote control (supplied fitted with size CR2450, lithium button battery).

# Front panel finishes

**Titanium G2 silver** with a silver badge. **Titanium G2 black** with a silver badge.

#### Weight and dimensions

Weight unit only 16.8 kg (37 lbs). Height 150 mm (6 inches) including feet. Width 483 mm (19 inches). Depth 410 mm (16¼ inches) including volume control and rear panel sockets.

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



# MUSICAL FIDELITY

# **Musical Fidelity Limited**

24/26 Fulton Road • Wembley • Middlesex • HA9 0TF• England Tel: +44 (0)20 8900 2866 • Fax: +44 (0)20 8900 2983 www.musicalfidelity.com

11/09/e&oe

# Reference Standard Tube Preamplifier by Musical Fidelity CLASS A | PRIMO MUSICAL FIDELITY CLASS A | PRIMO

Total system linearity.
Zero feedback.
Pure Class A.
Triode tubes.
Fully balanced.

The culmination of twelve years of research and development at Musical Fidelity, the Primo is the best preamp we have ever made. Its sound is superlative, it is beautifully designed and built, and it is extremely reliable.

The instant you touch the Primo volume control knob, and see the tubes glowing within, you know that this is like no other preamp you have ever experienced.

# Design background.

The Primo is the result of one man's passion for tubes driving an intensive R&D program.

Antony Michaelson's well-known love for tubes is the reason why, over the past 30 years, Musical Fidelity has sold more small signal tube equipment than any other manufacturer, all of it notable for very low distortion, very long tube life and high reliability.

That might satisfy some people, but not Antony. He still wanted to make a

reference standard tube preamp. With the release of the Titan, the AMS50 and the AMS100 (which will be released in June 2010), all of them super, pure Class A power amps, it was clear that the time had come.

Our R&D department was determined to do everything possible to make Primo a truly extraordinary preamp. We not only conducted exhaustive studies of layouts, circuit diagrams, components and materials, we even analysed the best of the competition (interesting, but no thanks.) Everything we know has gone into making the Primo preamp different from, and better than, anything that has gone before.

## Technical description.

The Primo is a zero feedback (global), pure Class A, triode, fully balanced preamplifier. It uses 14 hand-selected ECC81s. It has excellent balanced technical performance.





Its distortion, across the band from 10Hz to 50kHZ, hovers around 0.0035%.

The Primo will deliver this performance regardless of the volume control setting and with a flat frequency response, 10Hz to  $50\text{kHz} \pm 0.5\text{dB}$ . It can drive any amplifier in existence, with any reasonably conceivable length of cable.

## Total system linearity.

The Primo's prime characteristic is its total system linearity, which ensures that it has

low distortion, low noise and wide bandwidth. We have achieved this by engineering the Primo with extremely low interstage coupling impedance. You can be sure that whatever frequency level or volume control setting you choose, the Primo's performance will be consistent.

The output stage is just as important. As far as we know, all other tube preamps, whether single-ended or balanced, drive the load with a single tube configuration. Not the Primo. In the Primo, both the balanced and the single-ended output stages have two pairs of output tubes in parallel. This ensures that the Primo's performance is completely linear when driving any conceivable amplifier or length of cable. In addition, the Primo has a huge overload margin and a colossal peak output level.

The net result is that the Primo sets a new performance standard for tube preamps.

#### Zero feedback.

The Primo's technical performance is all the more remarkable because it does not have overall feedback. Balanced distortion, 10Hz to 50kHz, is less than 0.004%. Even at 100kHz, the distortion is only about 0.02%. For a full feedback design, these figures would be remarkable. For a zero feedback configuration, they are, as far as we know, without precedent.

The noise ratio, at about –119dBA, is just as remarkable. Please remember that adding feedback reduces noise, so the Primo's noise performance, as it is zero feedback, is exceptional.

Apart from reducing measured distortion, feedback tends to hide errors and inconsistencies in printed circuit board design, circuit design and physical layout. The Primo's impressive technical measurements prove that, without question, the circuit design, layout and internal layout are consummately skilful.

#### Power supply.

With tube preamps, power supply performance is especially critical. The Primo's power supply is housed in mu metal, to ensure that there is no magnetic interaction with any of the delicate, signal-handling components. There is a separate, fully regulated HT and heater circuit for both channels. They both have extremely low noise and a soft on feature which helps to ensure extra long tube life. We could talk at length about the performance of the power supply, but the proof is in

