

Then we go one step further. We use a dual bi-filar choke system. By this, we mean that both the B+ and B- are in the same choke. They cancel out each other's noise and magnetic field. This provides stunningly good noise rejection and has profound implications for total amplifier performance. We are unique in the world in using this innovative system.

The sonic effects of using choke regulation are amazingly quiet background, stable, precise imaging and fine detail recovery.

Our unique choke regulation system also gives outstanding mains noise filtration and rejection. It ensures top notch, low noise power supply performance and immunity from mains-borne interference. With the M6, you don't need mains conditioners. (In general, we advise against mains conditioners, as most do nothing, while active ones can create more problems than they solve.)

#### The M6 PRX power amp is completely neutral.

Another challenge for power amps is that loudspeakers can present horrendous problems. Even when a loudspeaker is rated at 4 ohms, it may have serious inductance and reactance and much lower practical impedance than its spec implies. Many power amps have difficulties with this.

The M6 PRX power amp has a combination of high power (260 wpc), high current, rock solid stability and low wideband distortion. Because of this, it is a proper 'voltage source' and will deliver a constant voltage regardless of loading, for the vast majority of loudspeakers. It can drive almost any loudspeaker with complete neutrality and gives a true representation of the input signal at the loudspeakers. It makes a true, high fidelity sound.

This cannot be said for most other power amps, as they will have different distortion, power and frequency response because of their technical limitations and therefore cannot be neutral.

The sound of the M6 PRX power amp grows on you. It might not grab you as being exciting or musical or rhythmic or any of those other hi-fi review terms that usually mean the reviewer heard amplifier limitations, rather than what was on the recording – but keep listening. The M6 PRX sound is completely neutral with lots of space and air. The bottom end is deeply extended and fast, and image placement is beautiful. The M6 PRX power amp is like a finely balanced top athlete: hugely powerful, incredibly fast, but utterly calm and unflappable.

#### The M6 PRX power amp is beautifully made and a pleasure to use.

Beautifully designed and finished, The M6 PRX CRPS dual mono power amp has a custom made front panel extrusion, custom made heat sink extrusions and buttons machined from solid metal. The badge is made of medical grade stainless steel.

In addition, the M6 PRX is extremely flexible. It has two sets of switchable inputs, one is balanced or single ended, and the other single ended, so it can easily be used in a home theatre set-up. The M6 PRX power amp also has line output sockets, so it is very easy to use M6s in bi-amp or tri-amp set-ups.

#### The M6 Pre preamp and M6 PRX power amp embody enduring values.

The M6 Pre preamp and M6 PRX CRPS dual mono power amp are certainly not cheap, but they deliver top notch technical performance, technical innovation, great design and finish, and flexibility in usage. They offer a lot for your money, and are designed for listening pleasure for many years to come.

## M6 Pre Preamp and M6 PRX Power Amp Specifications

### M6 Pre Preamp

#### Output

##### Voltage

**RCA singled ended** 9.5Vrms, 26V peak to peak. **XLR balanced** 19Vrms, 52V peak to peak.

**Output impedance** *RCA single ended* 47Ω. *XLR balanced* 47Ω.

#### Line inputs

**THD + N, 20Hz to 20kHz** *RCA single ended* <0.005%. *XLR balanced* 0.004%.

**Signal to noise ratio** *RCA single ended and XLR balanced* >96dB 'A' weighted.

**Input sensitivity for full output** *RCA single ended* 2.2V. *XLR balanced* 4.4V.

**Input impedance** *RCA single ended* 75KΩ. *XLR balanced* 150KΩ.

**Overload margin** *RCA single ended and XLR balanced* 12 dB.

**Channel separation** *RCA single ended and XLR balanced* >96dB.

**Frequency response** +0, -0.1dB, 10Hz to 80kHz.

#### Phono inputs

**Input sensitivity** 3.5mV (MM), 440μV (MC).

**Signal to noise ratio** 81dB 'A' weighted.

**Input impedance** 47KΩ.

**Overload margin** 29dB.

#### Connections

**Phono MM/MC inputs** One pair MM/MC level RCA connectors.

**Line inputs** Two pairs line level XLR (balanced) connectors. Four pairs line level RCA connectors.

**Line outputs** One pair line level RCA connectors, constant level TAPE outputs. One pair line level XLR (balanced) connector outputs. One pair line level RCA connector outputs.

**USB input** USB type 'B' (square) socket.

#### Power requirement

**Mains voltages** 115/230VAC 50/60Hz (factory pre-set).

100VAC 50/60Hz (alternative).

**Consumption** 15 Watts.

#### Weight and dimensions

**Unit only**, unboxed 11.4kg (25 lbs).

**Height, including feet** 126mm (5").

**Width** 440mm (17½"). **Depth including knob and rear terminals** 400mm (15¾").

#### Standard accessories

IEC type mains lead (10-Amp type). M6 PRE remote control. Two batteries, LR03 or AAA, manganese alkaline type.

### M6 PRX CRPS Power Amp

#### Output

**Power** 260 Watts per channel into 8 Ohms (24dBW).

**Voltage** 46 Volts RMS, 20Hz to 20 kHz, onset of clipping. 130 Volts peak-to-peak.

**Current peak-to-peak** 140 Amps.

**Damping factor** 210.

**Output devices** Four pairs per channel.

#### Line input

**THD+N** <0.007% typical, 20Hz to 20 kHz.

**Signal to noise ratio** >120dB 'A' weighted.

**Input impedance** 50k Ohms.

**Frequency response** +0, -1dB, 10Hz to 100kHz.

#### Connections

**Line level inputs** One pair line level XLR (balanced) connectors. Two pairs line level RCA connectors.

**Speaker outputs** Four pairs 4mm banana plug/binding posts. One pair RCA loop outputs.

#### Power requirement

**Mains voltages** 115/230VAC 50/60Hz (factory pre-set). 100VAC 50/60Hz (alternative).

**Consumption** 750 Watts maximum.

#### Weight and dimensions

**Unit only**, unboxed 19.7kg (43½lbs).

**Height, including feet** 125 mm (5").

**Width** 440 mm (17½").

**Depth** front to back, including terminals 390 mm (15½").

#### Standard accessories

IEC type mains lead (10-Amp type).

# M6 Series

## M6 Pre Fully Balanced Preamp and M6 PRX CRPS Dual Mono Power Amplifier by Musical Fidelity



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

**True high fidelity.  
Complete neutrality.  
Unique, bi-filar choke regulation.**

The M6 Pre fully balanced, Class A preamplifier and M6 PRX 260 wpc, high current, double choke regulated, dual mono power amplifier are designed to offer very high performance. If we were asked which product best represents Musical Fidelity's total product philosophy, we would nominate the M6 PRX power amp, because it blends top notch technical performance, innovative technical solutions, beautiful visuals and finish, and excellent value for money.

The M6 Pre and M6 PRX offer technical performance better than most components that cost much more. They have more power, less distortion, better load driving, better stability, wider overload margins, lower noise – you name it and the M6 Pre and M6 PRX are just about the best available, regardless of price.

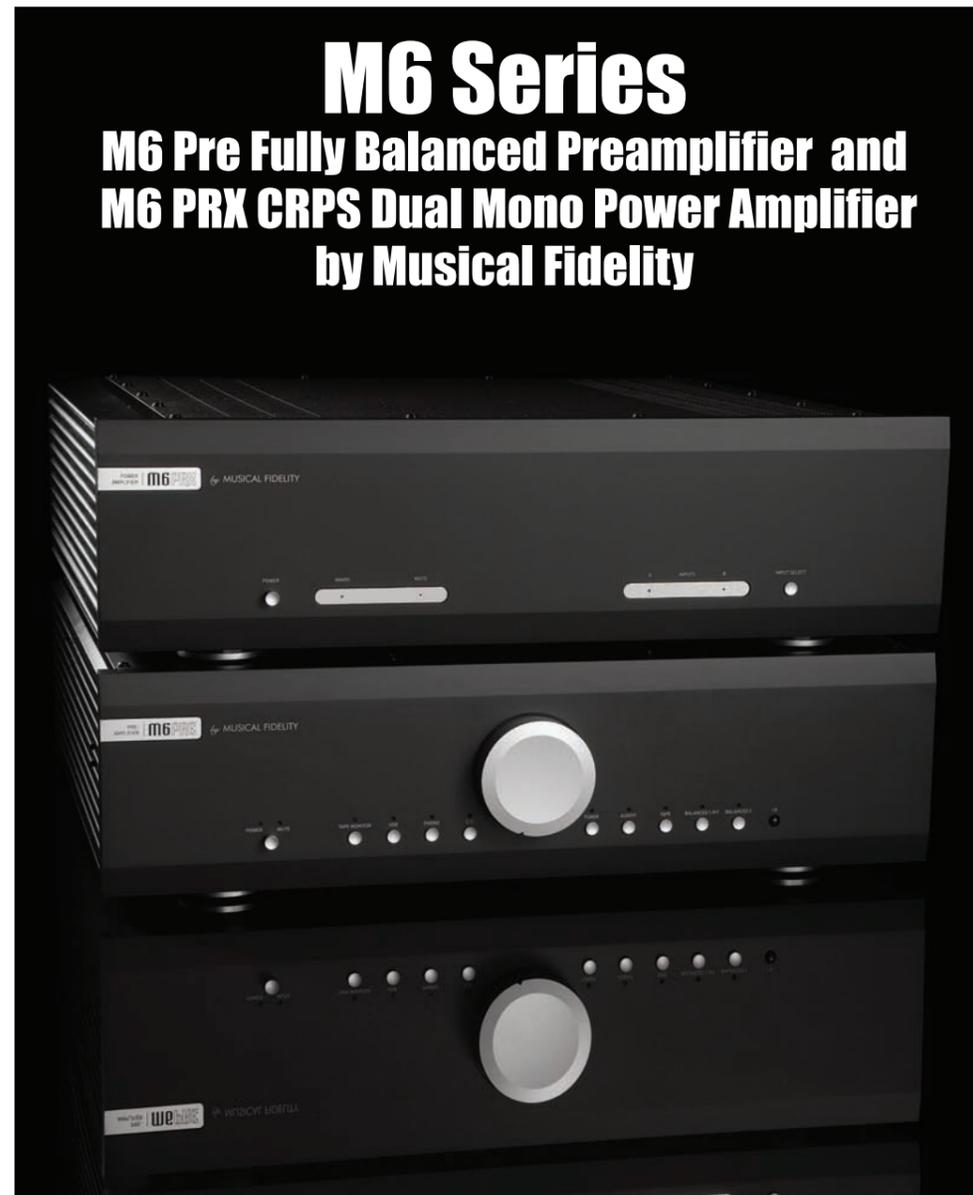
#### **Technical performance comes first.**

At Musical Fidelity, we believe that technical performance is the first step to real neutrality and an honest hi-fi sound. There is a myth in high end that technical performance is somehow irrelevant. In no other technology, art or craft is technical performance irrelevant. We cannot get our heads around the idea that high-end hi-fi is the sole exception. How can an amplifier with poor technical performance communicate without colouration? It simply is not possible.

Our aim in hi-fi design is to create superb technical performance. Then we engineer proper musical reproduction so that you hear is the truth, the whole truth, and nothing but the truth. That is what high fidelity is all about.

#### **The M6 Pre preamplifier is fully balanced and without limits.**

Unlike many preamps calling themselves fully balanced, the M6 Pre preamplifier is balanced from beginning to end. Many devices have a balanced input with a balanced output and a single-ended preamp in between. Unlike these 'pretenders to the throne,' the M6 Pre preamp is genuinely fully balanced from its input sockets to its output sockets.



The M6 Pre preamp has very low distortion, wide bandwidth, low noise and low output impedance, and a very wide input overload margin. In practical terms, this means that the M6 Pre preamp cannot be overloaded. It can drive any power amp, with any reasonable length of cable, with complete neutrality. In effect, the M6 Pre is a preamplifier without limits.

The wide range of inputs on the M6 Pre gives it great flexibility. It has phono MC/MM with very accurate RIAA, low noise and low distortion; CD; tuner; aux with home theatre bypass, tape and tape recorder loop; two balanced inputs, one with home theatre bypass; and digital USB.

#### **The M6 Pre preamp has pure Class A circuitry and pure Class A sound quality.**

With its state-of-the-art, pure Class A circuitry, the M6 Pre sounds sweet, clear and fast with very extended, tight bottom end. Its imaging is excellent. Perhaps its most noticeable feature is the air and space that allow the music to breathe naturally.

After we achieved its great technical performance, we made sure that the M6 Pre would do everything we could ever want from a preamp. It has phono and USB, home theatre bypass options, balanced inputs and outputs and single-ended inputs and outputs.

The build quality of the M6 Pre preamp is excellent. The front panel is a custom extrusion, with a beautiful finish. The knobs and buttons are machined from solid, milspec aluminium. The badge is made from medical-grade stainless steel.

#### **The M6 PRX high current, double choke regulated, dual mono power amp.**

The M6 PRX high current, double choke regulated, dual mono power amplifier has outstanding technical performance, right up with best at any price. It is powerful, too, with 260 wpc. Distortion is less than 0.007% wide band. It also has an outstanding noise ratio and high peak current delivery at more than 85 amps peak-to-peak.

Regardless of price, very few amps measure as well as the M6 PRX CRPS, dual mono power amp. It is designed to give a true representation of the input signal at the loudspeakers. This may seem a statement of the obvious as, at first glance, the job of a power amp seems simple enough. All it has to do is to amplify the preamp's output by about forty times, and drive the loudspeakers. But this turns out to be far from simple.

#### **The M6 PRX power amp uses our unique Choke Regulated Power Supply.**

The M6 PRX dual mono power amp uses the same basic circuit topology as our mega Titan or superlative AMS50. Uniquely, however, the M6 power amp has our Choke Regulated Power Supply (CRPS) which gives large improvements in performance and mains isolation. Chokes were commonly used in the tube amp era. Musical Fidelity were the first company in the world to use choke regulation with transistor amplifiers. We have been using the technique since 1987.

A choke offers high resistance to AC and very low resistance to DC. It hugely reduces power supply noise and its harmonic spectrum. The normal power supply 'saw tooth' wave form is reduced by about 17 times, to a harmonically simple sine wave. We cannot over-emphasise the importance of this transformation. Power supply noise is one of the big problems of amplifier design. Choke regulation offers a *passive* solution to this problem.

