

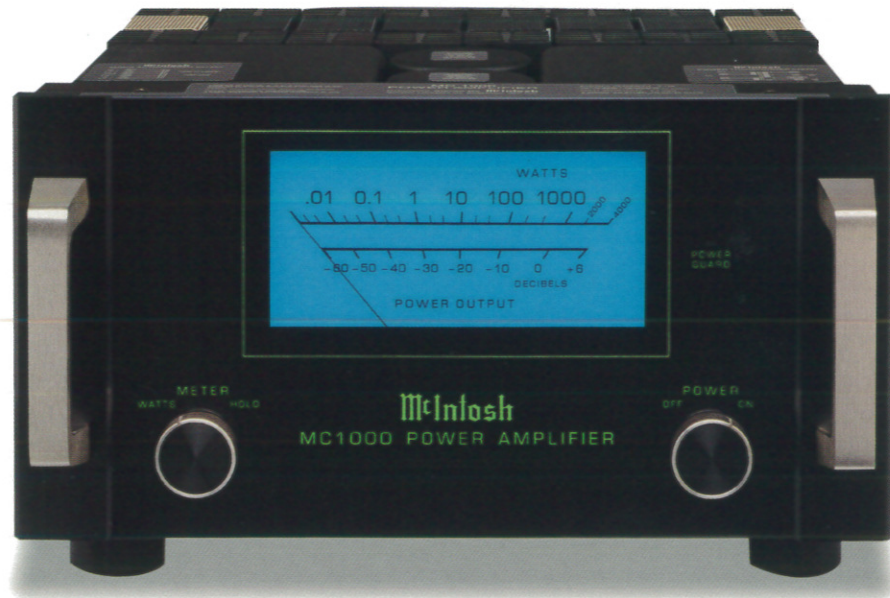
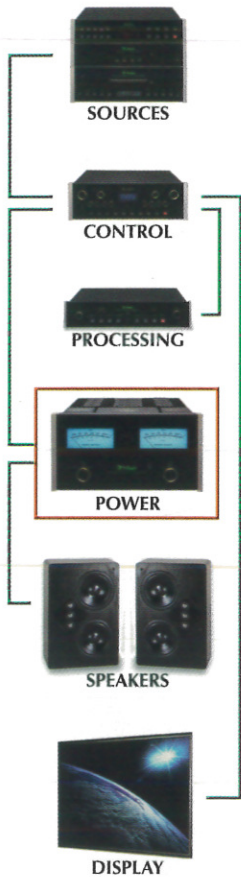
**McIntosh**<sup>®</sup>  
THE GREAT AMERICAN POWERHOUSE



MC1000 Monoblock Power Amplifier

# MC1000

## Monoblock Power Amplifier



See "SYSTEMS ENGINEERING"  
in main brochure for more on  
McIntosh system architectures.

In the rarified world of extreme audio, power is packaged in blocks of *one*. While producing a kilowatt of power, the MC1000 makes no concessions to purity. In fact, its extraordinary double-balanced circuitry with exclusive output autoformer cancels virtually all distortion. The MC1000 is quite simply one of the finest amplifiers ever conceived.

### Featured Technologies

**DOUBLE-BALANCED PUSH-PULL DESIGN.** The MC1000 is fully balanced from input to speaker output. Two matched amplifiers operate in push-pull with their outputs combined in the McIntosh autoformer. Each half of the amplifiers contains complimentary balanced circuitry. The resulting double-balanced configuration cancels virtually all distortion. This circuit design is possible only with the proprietary McIntosh autoformer.

**EXCLUSIVE MCINTOSH OUTPUT AUTOFORMER.** An impedance mismatch between an amplifier and loudspeaker can cause distortion and a reduction in power. The legendary McIntosh autoformer is a hand-crafted transformer with output connections for 2, 4, and 8 ohms, allowing an ideal impedance match. A McIntosh amplifier with an autoformer can also safely drive multiple speakers connected in parallel without shortening the life expectancy of the output stage. There is absolutely no performance penalty with an autoformer. In fact, its frequency response exceeds that of the output circuit itself, and extends well beyond the audible range. Distortion is so low it is virtually immeasurable.

**EXCLUSIVE MCINTOSH POWER ASSURANCE SYSTEM.** Power Assurance is a collection of technologies that enhance performance and reliability and protect the amp and the loudspeakers.

**Power Guard® clipping protection.** Power Guard ensures that the amplifier will always deliver full power without causing clipping distortion. If an amplifier channel is overdriven, Power Guard automatically reduces the input volume just enough to keep distortion below 2% and prevent any clipping distortion. Thanks to an optical resistor, Power Guard acts literally at the speed of light, producing absolutely no audible side effects. An amplifier with Power Guard will actually deliver clipping-free output well above its rated power.

**Sentry Monitor® current protection.** Sentry Monitor continually senses the voltage and current of the output stage and confines it to a safe limit. Sentry Monitor does not limit power output.

**Thermal Cutout.** If the cooling air is blocked and the power transistors become too hot, thermal cutouts protect against overheating until the amp cools.

The "Bifilar" winding technique used in the making of autoformers earned McIntosh one of its first patents. The design is so advanced it is still used today.



Oversize die-cast aluminum heat sinks keep output transistors operating at cool temperatures, one reason why a McIntosh lasts longer.

## About the MC1000 Companion Products

The McIntosh products shown at right are logical companions for the MC1000. Separate literature is available. Check with your McIntosh dealer for any late additions. McIntosh speaker systems are also covered in detail in separate literature.

**C100 Preamplifier/Controller.** The C100 and MC1000 form a completely balanced audio system of unparalleled refinement.

**XRT26 Loudspeaker.** The stunning XRT26 features patented LD/HP® bass and midrange drivers and a multi-tweeter Line Source column that increases power handling, minimizes distortion, and controls vertical dispersion. Useable bass response extends down to 20Hz.

**XR290 Loudspeaker.** The powerful XR290 provides nearly flat response all the way down to 20Hz. All drivers are in a Line Source configuration, resulting in tightly controlled vertical dispersion that minimizes floor and ceiling reflections for a deep and well-focused soundstage.



C100 PREAMPLIFIER/CONTROLLER

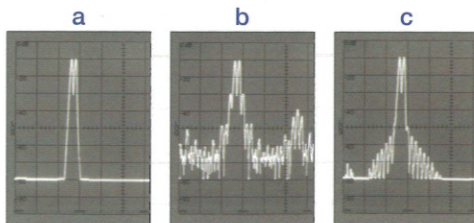


As seen on the inside surface of this demonstration piece, the screening process for a McIntosh glass panel entails as many as 12 individual layers.

The glass panels are cut using a computer-controlled high-pressure water jet.

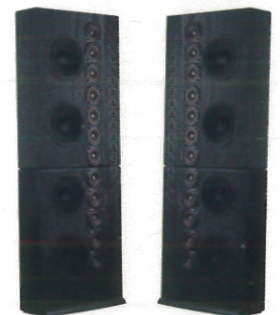


XRT26 LOUDSPEAKER



The patented McIntosh Power Guard in the MC1000 provides real-time clipping protection without affecting power output or sound quality.

- a) test signal
- b) overdriven amp without Power Guard produces SEVERE clipping distortion
- c) overdriven amp with Power Guard produces NO clipping distortion



XR290 LOUDSPEAKER

## Featured Technologies (cont'd.)

**DC Failure protection.** In the rare event of an output circuit failure, any DC current that appears in the output is shunted to ground by the autoformer, protecting the speakers from damage.

**Turn-On Delay.** This circuit delays operation for about two seconds after turn-on in order to avoid any pops or thumps generated as other equipment turns on.

**Soft Start inrush protection.** Thermistors in the power transformer act as a cushion against inrush current, eliminating component stress during turn-on. Soft Start is one of many design details that contribute to the remarkable longevity of McIntosh equipment.

**ILLUMINATED PEAK-RESPONDING WATTMETERS.** The output in watts of any amp depends on loudspeaker impedance, which varies considerably with the frequency content of music. Conventional output meters may display "watts" but they actually measure output *voltage* because they assume a *fixed* impedance. McIntosh wattmeters display *real* output in watts, and thus indicate the *real* power required to drive a particular speaker. McIntosh wattmeters respond 95% full scale to a single-cycle tone burst at 2kHz. Response is almost 10-times faster than a professional VU meter. The "hold" feature provides a longer pause at the peak reading. The meter illumination can be switched off.

**BALANCED CONNECTIONS.** A premium feature not usually found in consumer audio gear, balanced connections guard against induced noise and allow long cable runs without compromising sound quality. A balanced connection between the MC1000 and the C100 Control Center provides 40dB more noise protection than would an unbalanced ("single-ended") connection.

**REMOTE POWER CONTROL.** This allows a McIntosh Control Center to turn the MC1000 and other system components on/off.

Why  
Choose  
McIntosh  
?

Most consumer electronics products are necessarily viewed as short-term investments because either they don't last or they quickly become obsolete in some way. *Coincidentally*, manufacturers supply a steady stream of "new-and-improved" products that you can buy. *Again*.

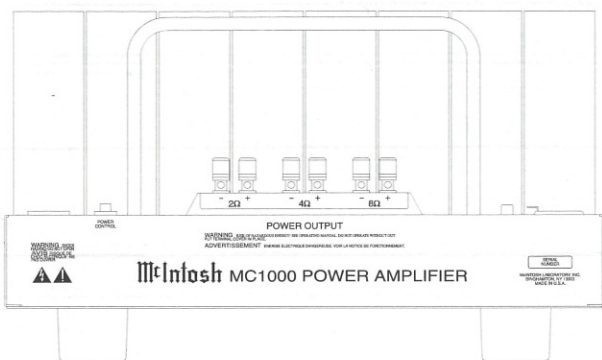
Behind every McIntosh is a fifty-year heritage of excellence, proudly carried forward by every employee. No production

lines, no "price-point" engineering, no planned obsolescence. McIntosh equipment is made to sound better and last longer.

When McIntosh products are presented to customers, the criteria they have been conditioned to overlook – reliability, longevity, craftsmanship, ease-of-use, adaptability, pride of ownership – suddenly leap to the top of their list.

The choice becomes clear: ***There is nothing like a McIntosh.***

# MC1000 Monoblock Power Amplifier



## FEATURES

- Double balanced push-pull design
- 1 x 1,000 watts (8/4/2 ohms)
- Balanced input
- Exclusive McIntosh output autoformer
- Wide power bandwidth
- Ultra-low distortion
- Exclusive McIntosh Power Assurance System:
  - Power Guard® clipping protection
  - Sentry Monitor® current protection
  - Thermal Cutout
  - DC Failure protection
  - Turn-On Delay
  - Soft Start inrush protection
- Illuminated peak-responding wattmeters with hold
- Remote power control
- Gold-plated high-current output terminals
- Fanless convection cooling
- Modular construction with stainless-steel chassis
- Glass front panel with illuminated nomenclature

## SPECIFICATIONS

### RMS Power Output (8/4/2 ohms)

1,000W minimum sine wave continuous average power output from 20Hz to 20kHz

### Output Load Impedance

2, 4, or 8 ohms

### Rated Power Band

20Hz to 20kHz

### Peak Output Current

> 160 amperes

### Total Harmonic Distortion

0.005% maximum at any level from 250 milliwatts to rated power output

### Intermodulation Distortion

0.005% maximum if instantaneous peak power output does not exceed twice the output power rating

### Dynamic Headroom

2.1dB

### Frequency Response

20Hz to 20kHz, +0 / -0.25dB  
10Hz to 100kHz, +0 / -3.0dB

### Input Sensitivity

2.5V

### A-Weighted Signal-to-Noise Ratio

Balanced:  
90dB (120dB below rated output)  
Unbalanced:  
85dB (115dB below rated output)

### Wide Band Damping Factor

200 (8 ohms)

### Input Impedance

10k ohms

### Power Guard®

Clipping is prevented and THD does not exceed 2% with up to 14dB overdrive at 1kHz

### Power Requirements

120V 50/60Hz, 12A

### Dimensions (h x w x d)

inch: 10.375 x 17.25 x 20.125  
cm: 26.4 x 43.8 x 51.1

### Weight

105 lbs. (47.6kg) net  
118 lbs. (53.5kg) shipping



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