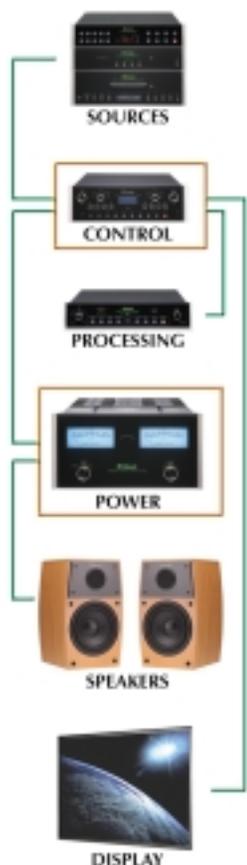


McIntosh 50



MA6900 Integrated Amplifier



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



Those considering a McIntosh system for the first time will find integrated amplifiers a comfortable place to start. In virtually every respect the MA6900 performs as well as McIntosh separates. The MA6900 incorporates premium McIntosh technologies – including autoformers, Power Assurance, and Silent Electromagnetic Switching – as well as several features that facilitate system integration and expansion.

Featured Technologies

EXCLUSIVE MCINTOSH OUTPUT AUTOFORMERS. An impedance mismatch between a power amplifier and a 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 between amp and speaker. A McIntosh amplifier with an autoformer can also safely drive multiple speakers connected in parallel without shortening the life 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.

ILLUMINATED PEAK-RESPONDING METERS. McIntosh meters respond 95% full scale to a single-cycle tone burst at 2kHz. Response is almost 10-times faster than a professional VU meter.

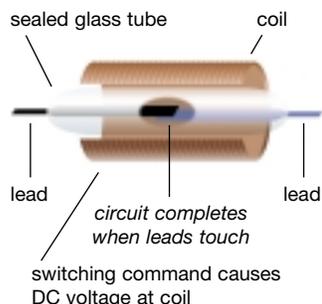
SILENT ELECTROMAGNETIC SWITCHING. In a conventional preamp, an input signal travels to a switch, and then travels to the input circuitry. Unfortunately, the farther a signal must travel, the more distorted it becomes. And this says nothing of what detritus a dirty switch can add to the signal. McIntosh Silent Electromagnetic Switching literally brings the switch to the input. The distortion-free switch consists of a glass tube containing oxygen-free gas and two signal leads separated by mere thousandths of an inch. The tube sits in a multilayer copper coil and the entire assembly is encased in shock-absorbent plastic. When DC voltage is applied to the coil in response to a switching command, current flow creates a magnetic field that causes the leads to bend and contact one another, completing the circuit. The inert gas eliminates corrosion of the contacts, ensuring a low-resistance, distortion-free switch that never needs cleaning. Another benefit is that non-selected inputs are truly "off," eliminating potential sources of interference.

PRECISION-TRIMMED VOLUME CONTROL. Level differences among channels in a stereo or surround system compromise sound imaging. The left and right sections of McIntosh volume controls are electronically trimmed for superior tracking.

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 excessive clipping distortion. Clipping not only sounds harsh, but also is the most common cause of tweeter burn out. If an amplifier channel is over-driven, Power Guard automatically reduces the input volume just enough to keep distortion below 2% and minimizes clipping distortion. Power Guard acts faster than hearing response time, producing absolutely no audible side effects. An amplifier with Power Guard will actually deliver low distortion 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.



The input selectors on the MA6900 actually control state-of-the-art silent electromagnetic switches.

MA6900 Companion Products

The McIntosh products shown at right are logical companions for the MA6900. Separate literature is available. Check with your McIntosh dealer for late additions.

MVP841 DVD/CD/Video CD Player. The MVP841 delivers crystal-clear DVD video and outputs Dolby Digital® and DTS® surround sound.

MR85 AM/FM Tuner with Dual Tuners. Ideal for multiroom systems, the MR85 is available with a second tuner (the TM1 module) that operates independently. A thoroughly engineered broadcast monitor, the MR85 reveals the upper limits of AM and FM performance. The supplied RAA1 AM antenna can be positioned away from sources of interference (e.g., TV sets, fluorescent lights) for greatly improved AM quality.

MVS3 A/V Selector. The MVS3 connects to the VIDEO data output of the MA6900 and accommodates five additional A/V sources.

RCT4 Remote Translator. The Translator allows non-McIntosh components to be operated with a McIntosh handheld remote or keypad controller. It connects to the data outputs on the MA6900.

PC4 AC Power Controller. The PC4 provides five AC outlets (four switched) for turning non-McIntosh components on and off automatically when it is connected to the power control output of a Control Center or Integrated Amplifier.

HC1 Home Controller. The HC1 connects to the HOME data output and allows operation of other devices such as lights and movie screens via a McIntosh handheld remote or keypad controller.

WK2 Keypad Controller or R649 IR Sensor. With switching for two outputs, the MA6900 can feed music to a second zone with the addition of a power amp and operation via keypad or sensor.

Academy Series Loudspeakers. The Academy loudspeakers satisfy the often contradictory demands of pure music versus movie sound. All Academy loudspeakers use the acclaimed LD/HP® driver – which significantly reduces bass distortion while increasing power handling. Academy models are available in floorstanding, bookshelf, in-wall, and subwoofer models in a variety of finishes.



MVP841 DVD/CD/VIDEO CD PLAYER



MR85 AM/FM TUNER



MVS3 A/V SELECTOR



RCT4 REMOTE TRANSLATOR



PC4 AC POWER CONTROLLER



HC1 HOME CONTROLLER



WK2 KEYPAD CONTROLLER; R649 SENSOR

academy
LOUDSPEAKERS

Floorstanding, bookshelf, in-wall, and subwoofer models available in a range of finishes



LS320

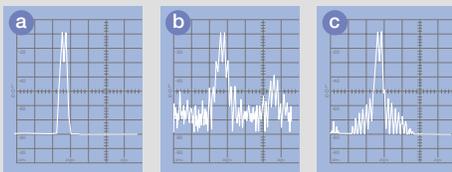


PS112

Featured Technologies (cont'd.)

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

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 loudspeakers from damage.



The patented McIntosh Power Guard in the MA6900 provides real-time clipping protection without affecting power output or sound quality.
a. test signal **b.** overdriven amp without Power Guard produces SEVERE clipping **c.** overdriven amp with Power Guard produces NO clipping

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 primary circuit 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.

EXCLUSIVE MCINTOSH 5-BAND EQUALIZER. The equalizer provides 12dB of boost or cut at center frequencies of 30, 150, 500, 1500, and 10000Hz. Notice that the center frequencies are clustered at the lower end of the spectrum where room correction is most often needed. When an equalizer control is in the center or flat position, its circuit components are *completely* removed from the signal path.

CONTROL DATA OUTPUTS. To facilitate system integration, the MA6900 outputs control data for source components. This allows remote operation of non-McIntosh components either by direct connection to compatible data inputs or via a McIntosh Remote Translator.

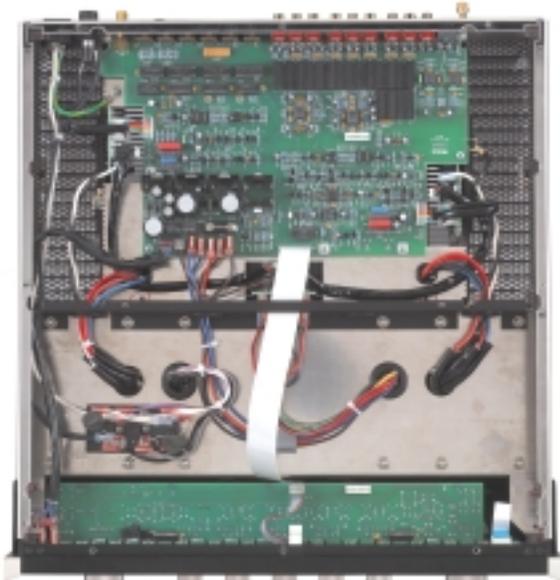
REMOTE POWER CONTROL. This enables the MA6900 to turn other McIntosh components on/off.

Why
Choose
McIntosh?

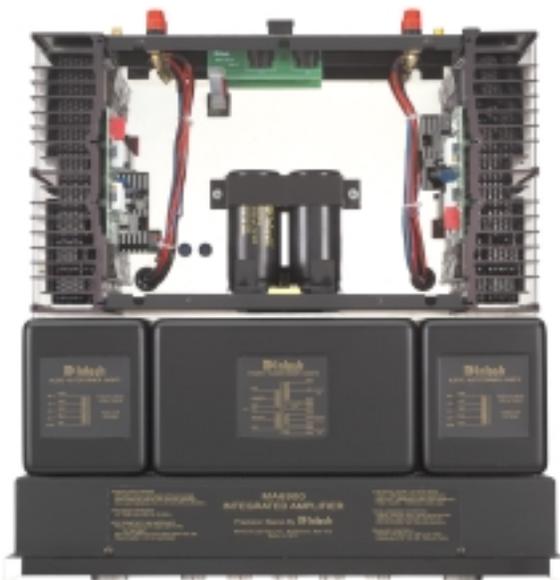
Consumer electronics products usually are viewed as short-term investments because they don't last or they quickly become obsolete in some way. But behind every McIntosh is a fifty-year heritage of excellence, proudly carried forward by every employee. No production lines, no "price-point" engineering, no planned obsolescence. McIntosh equipment is made to sound better and last longer.

When customers are presented with McIntosh products, 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 then becomes clear: *There is nothing like a McIntosh.*

MA6900 Integrated Amplifier



Bottom internal view



Top internal view

- 2 x 200 watts (8/4/2 ohms)
- Exclusive McIntosh output autoformers
- Wide power bandwidth with 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
- Exclusive McIntosh 5-band equalizer circuit
- Silent electromagnetic switching
- Precision-trimmed volume control
- Loudness Compensation
- 6 source selections (including phono); one balanced input
- Switching for 2 outputs
- Accommodates more sources with McIntosh MVS3 A/V Selector
- Control data output for source components
- Remote power control (1 main, 1 accessory, 2 switched)
- Remote operation of lights, screens, and drapes with McIntosh HC1 Home Controller
- Electronically regulated power supply with double-shielded transformer
- Gold-plated input and output jacks
- Fanless convection cooling
- Modular construction with polished stainless steel chassis
- Glass front panel with illuminated nomenclature
- Infrared remote control
- Connector for external IR sensor or keypad controller
- Headphone jack



RMS Power Output (8/4/2 ohms)

200W min. sine wave continuous average power output per channel from 20Hz to 20kHz with both channels operating

Frequency Response

20Hz to 20kHz, +0 / -0.5dB

Output Load Impedance

2, 4, or 8 ohms

Rated Power Band

20Hz to 20kHz

Peak Output Current

> 50 amperes

Total Harmonic Distortion

0.005% max. at any level from 250 milliwatts to rated power per channel from 20Hz to 20kHz with both channels operating

Intermodulation Distortion

0.005% max. if instantaneous peak power does not exceed twice the rated output

Input Sensitivity

High level: 250mV for 2.5V rated output (50mV IHF)

Phono: 2.5mV for 2.5V rated output (0.5mV IHF)

PWR AMP IN: 2.5V for rated output

A-Wtd. Signal-to-Noise Ratio

Phono: 90dB below 10mV input (84dB IHF)

High level: 100dB below rated output (90dB IHF)

Power Amp: 110dB below rated output

Max. Preamp Voltage Output

Preamp output: 8V

IHF Dynamic Headroom

2.4dB @ 2, 4, or 8 ohms

Damping Factor

> 40

Maximum Input Signal

High level: 8V

Phono: 90mV

Voltage Gain

High level to tape: 0dB

High level to main: 20dB

Input Impedance

High level: 22k ohms

Phono: 47k ohms, 65pf

Main in: 20k ohms

Equalizer Controls

Variable ±12dB at 30Hz, 150Hz, 500Hz, 1500Hz, and 10kHz

Power Guard®

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

Power Requirements

120V 50/60Hz, 4A

Dimensions (h x w x d)

inch: 7.125 x 17.5 x 18.75

cm: 17.9 x 44.5 x 47.6

knob clearance: 1" (2.54 cm)

Weight

74.5 lbs. (34kg) net

92.5 lbs. (42kg) shipping

