C100 Preamplifier/Controller
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Preamplifier/Controller

It embodies the expertise of famously uncompromising engineers. It is a fully balanced design with a separate chassis for total isolation of the audio signal. It uses the finest one-percent resistors and capacitors and internal gold-plated contacts with solid-soldered joints. No details are overlooked in the design of a preamplifier virtually devoid of any measurable noise. The McIntosh C100 awaits those who may be searching for their last preamplifier.

Featured Technologies

FULLY BALANCED DUAL-CHASSIS DESIGN. The extraordinary C100 is fully balanced from input to output – a configuration that essentially cancels all distortion. The precision volume control has four matched sections and the main gain stage uses four matched amplifiers operating in push-pull. Even unbalanced signals are converted to and processed as balanced signals. The Preamplifier chassis, which contains only audio circuits and inputs/outputs, is completely isolated from the power supply and the microprocessors, ensuring total noise rejection. The Controller chassis contains the selector switches, digital display, all control microprocessors, and the power supply. After any switching operation, the control circuits are automatically turned off to eliminate any possibility of microprocessor noise reaching the audio circuits. The only connection between the Preamplifier and Controller is a 25-pin shielded cable.

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.
About the C100 Companion Products

The McIntosh products shown at right are logical companions for the C100. Separate literature is available. Check with your McIntosh dealer for any late additions. McIntosh speaker systems are also covered in detail in separate literature.

MC1000 Power Amplifier, MDA700 D/A Converter, and MCD751 CD Transport. The MC1000 double-balanced power amp and the C100 both hail from the no-compromise school of design. Add the MDA700 converter with balanced output plus the MCD751 transport for a totally balanced audio system without peer.

MR85 AM/FM Tuner. A natural companion, the MR85 tuner is a thoroughly engineered broadcast monitor that reveals the upper limits of AM and FM performance.

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 C100.

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.

R649 IR Sensor. With switching for three additional stereo power amplifiers and a connector for an external IR sensor, the C100 can supply music to other areas, with remote operation via the R649 wall-mount IR sensor.

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.
C100 Preamplifier/Controller

FEATURES
- Fully balanced circuitry from input to output
- Dual chassis isolates audio signals from power and switching
- Extra-wide dynamic range
- Ultra-low distortion
- Silent electromagnetic switching
- Precision, optically regulated volume control with digital readout in decibels or percent
- Programmable source trim
- 10 source selections including separate MM and MC phono
- 3 balanced inputs (includes balanced tape loop)
- 4 balanced outputs (Main, Tape1, Line 1, Line 2)
- Independent listen and record selection
- Dual processor loops
- Control data output for source components
- Remote power control (2 main, 2 switched)
- Separate electronic regulators for each preamplifier section
- Discrete output stage
- Polyester coupling capacitors
- Low-noise 1% metal film resistors throughout
- Ultra-precision (.5%) metal film resistors and 1% polypropylene capacitors for phono equalization
- Gold-plated input and output jacks
- Modular construction with steel chassis
- Glass front panel with illuminated nomenclature
- Infrared remote control (all circuitry in power supply chassis)
- Connector for external IR sensor
- Headphone jack

SPECIFICATIONS

- **Frequency Response**
  10Hz to 40kHz, +0 / -0.5dB

- **Rated Voltage Output**
  2.5Vrms

- **Maximum Voltage Output**
  Balanced: 25Vrms
  Unbalanced: 12Vrms

- **Output Impedance**
  50 ohms balanced and unbalanced

- **Total Harmonic Distortion**
  0.002% maximum from 20Hz to 40kHz

- **Input Sensitivity**
  Phono: 4.4mV for rated output
  High level: 450mV for rated output

- **Maximum Input Signal**
  MM phono: 50mV
  High level: 5V balanced and unbalanced

- **A-Weighted Signal-to-Noise Ratio**
  Phono: 86dB
  High level: 100dB

- **Input Impedance**
  MC phono: 10 ohms
  MM phono: 47k ohms, 65pf
  High level:
  44k ohms balanced
  22k ohms unbalanced

- **Voltage Gain**
  MC phono to tape: 70dB
  MM phono to tape: 40dB
  High level to tape: 0dB
  High level to main: 15dB

- **AC Outlets**
  4 switched, 1 unswitched

- **Power Requirements**
  120V 50/60Hz, 30W

- **Dimensions (h x w x d)**
  inch: 5.375 x 17.5 x 17.5 for each chassis
  cm: 13.7 x 44.5 x 44.5 for each chassis
  Controller knob clearance: 1.125” (2.9 cm)

- **Weight**
  70 lbs. (31.8kg) shipping total in two cartons

McIntosh Laboratory, Inc., 2 Chambers Street, Binghamton, New York 13903
tel (607) 723–3512 • U.S. toll-free (888) 979–3737 • fax (607) 772–3308 • www.mcintoshlabs.com

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