



C42 Audio Control Center

# SOURCES CONTROL PROCESSING POWER SPEAKERS

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

# C42

# Audio Control Center





ow much better will the next recording format be? And the one after that? More to the point, will you be able to appreciate the improvement? The C42 is for discriminating listeners who delight in the nuances revealed only by the most exceptional audio equipment. Generously appointed, the C42 heralds a new standard for audio purity.

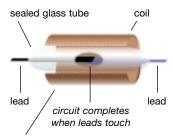
# Featured Technologies

**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, OPTICALLY REGULATED VOLUME CONTROL.** If McIntosh electromagnetic switching brings the switch to the input, then the C42's volume control brings the *attenuator* to the input. The volume knob actually operates an optical rotary encoder with 128 steps; it sends instructions at the speed of light to the digitally controlled attenuator located near the inputs. Together they provide 0.5dB resolution with 0.05dB accuracy.



The input selectors on McIntosh Control Centers actually control state-of-the-art silent electromagnetic switches.



switching command causes DC voltage at coil

### About the C42 Companion Products

The McIntosh products shown at right are logical companions for the C42. Separate literature is available. Check with your McIntosh dealer for any late additions. McIntosh speaker systems are also covered in detail in separate literature.

MC352 Power Amplifier, MDA700 D/A Converter, and MCD751 CD Transport. The double-balanced MC352 is designed to complement the C42. Add the MDA700 converter with balanced output plus the MCD751 transport for a balanced audio system and a profound musical experience.

**MR7084 AM/FM Tuner.** A natural companion, the MR7084 tuner is a thoroughly engineered broadcast monitor that reveals the upper limits of AM and FM performance.

**RCT3 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 C42.

**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 two power amps and a connector for an external sensor, the C42 can supply music to a second zone with remote operation via the R649 wall-mount sensor.



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.





MC352 POWER AMPLIFIER



MDA700 D/A CONVERTER



MCD751 CD TRANSPORT



MR7084 AM/FM TUNER



RCT3 REMOTE TRANSLATOR



PC4 AC POWER CONTROLLER



R649 IR SENSOR

# Featured Technologies (cont'd.)

**EXCLUSIVE MCINTOSH 8-BAND EQUALIZER.** The equalizer provides 12dB of boost or cut at center frequencies of 20, 35, 70, 150, 300, 600, 1200, and 4000Hz. 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.

**PROGRAMMABLE SOURCE TRIM.** A traditional McIntosh feature that allows matching the output levels of different source components, source trim in the C42 establishes new standards for audio purity and operating convenience. Instead of adjusting individual potentiometers, the trim for each input is stored electronically as a volume offset, using the tuner level as the standard.

**CONTROL DATA OUTPUTS.** To facilitate system integration, the C42 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, a "learning" device that makes it possible to operate virtually any component with the C42's remote.

**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 C42 and the MC352 Power Amp provides 40dB more noise protection than would an unbalanced ("single-ended") connection.

**REMOTE POWER CONTROL.** The C42 has four separate remote power jacks (main, accessory, switched 1, switched 2) that enable it to turn connected power amps on/off.



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

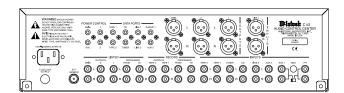
lines, no "price-point" engineering, no planned obsolescence. McIntosh equipment is made to sound better and last longer.

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.

# C42 Audio Control Center





### **FEATURES**

Extra-wide dynamic range

Ultra-low distortion

Exclusive McIntosh 8-band equalizer

Silent electromagnetic switching

Precision, optically regulated volume control with digital readout in decibels or percent

Programmable source trim

9 source selections including MM phono

Balanced input

3 balanced outputs (Main, Line 1, Line 2)

Independent listen and record selection

Dual processor loops

Control data output for source components

Remote power control (1 main, 1 accessory, 2 switched)

Separate electronic regulators for each preamplifier section

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

Connector for external IR sensor

Headphone jack

### **SPECIFICATIONS**

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

**Rated Voltage Output** 

2.5Vrms (balanced and unbalanced)

Maximum Voltage Output

10Vrms

**Output Impedance** 

240 ohms

**Total Harmonic Distortion** 

0.002% maximum from 20Hz to 20KHz

**Input Sensitivity** 

Phono: 4.5mV for rated output High level: 450mV for rated output **Maximum Input Signal** 

MM phono: 50mV High level: 5V

A-Weighted Signal-to-Noise Ratio

Phono: 86dB High level: 97dB

Input Impedance

Phono: 47k ohms, 65pf High level: 22k ohms

Voltage Gain

Phono to tape: 40dB High level to tape: 0dB High level to main: 15dB **Power Requirements** 

100V 50/60Hz, 30W 110V 50/60Hz, 30W 120V 50/60Hz, 30W 220V 50/60Hz, 30W 230V 50/60Hz, 30W 240V 50/60Hz, 30W

Dimensions (h x w x d)

inch: 5.375 x 17.5 x 17.5 cm: 13.7 x 44.5 x 44.5

includes clearance for connectors

Weight

25.5 lbs. (11.6kg) net 40 lbs. (18.2kg) shipping

