McIntosh®

THE GREAT AMERICAN POWERHOUSE

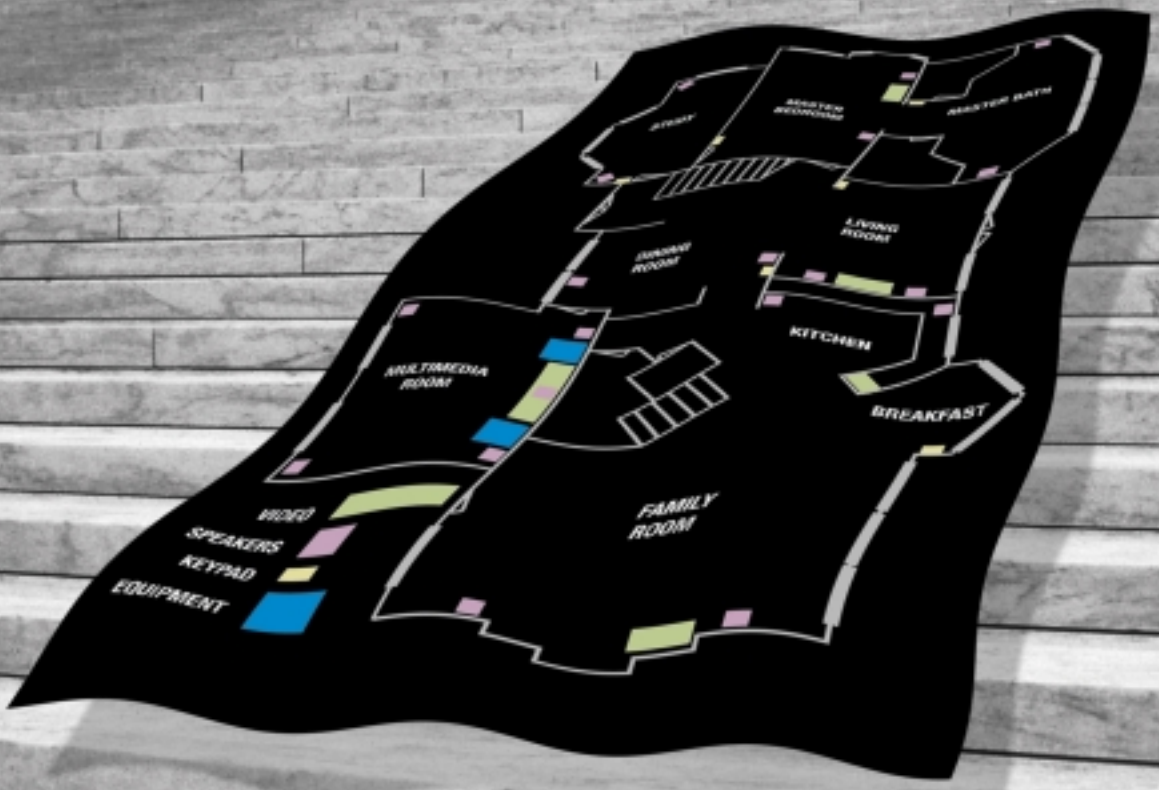
FIFTY-YEAR 50 ANNIVERSARY


# CR12 Multizone A/V Control Center
# MC7108 8-Channel Power Amplifier

McINTOSH MULTIZONE A/V

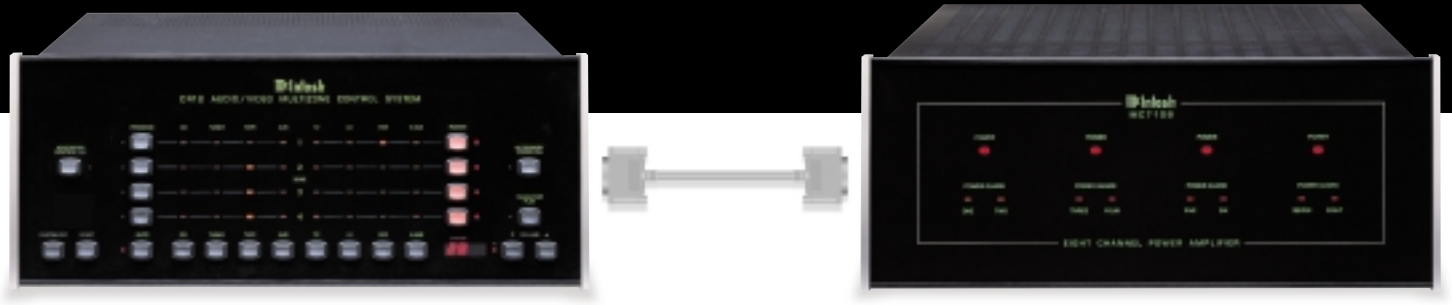
# McINTOSH MULTIZONE A/V

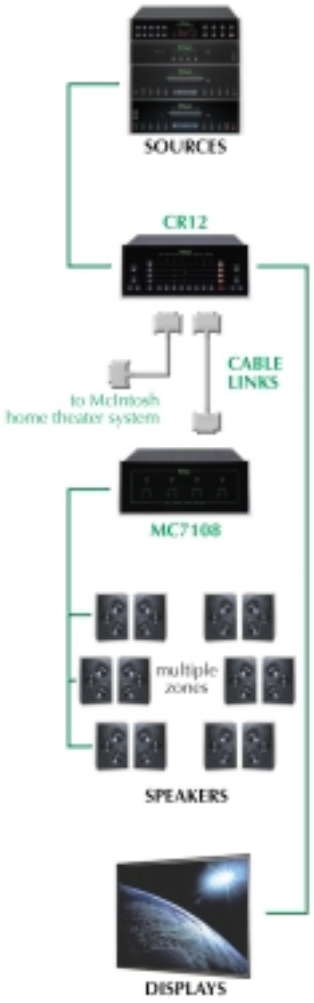
For more than a decade McIntosh has offered multizone systems distinguished not only by musical excellence but also by operating ease and adaptability. A McIntosh multizone A/V system integrates seamlessly with non-McIntosh products and can be scaled for any size installation. If you love music and you want McIntosh performance, a multizone system gives you more of both. But it's also a smart investment, as it uses just one set of audio and video sources to supply any number of rooms or areas in your home. The CR12 Multizone A/V Control Center and the MC7108 8-Channel Power Amplifier go together like hand in glove, offering abundant possibilities for a house-wide entertainment system with true McIntosh performance.



# CR12
Multizone A/V Control Center

# MC7108
8-Channel Power Amplifier






All it takes is one cable to join the CR12 and the MC7108… and one more to link a multi-zone system to a home theater.

## Featured Technologies

**FOUR INDEPENDENT ZONES (CR12).** The CR12 is four audio/video preamps in one chassis, each with its own input selector, volume control, and tone controls. For example, you can listen to FM stereo in one zone, CD in a second, watch satellite in a third, and watch a DVD movie in a fourth – *all at the same time*. In addition, a local "private" A/V source can be connected for each zone for use only by that zone. As many as six CR12s can be linked ("cascaded") for a total of 24 independent A/V zones.

**CONTROL DATA OUTPUTS (CR12).** To facilitate system integration, the CR12 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 (CR12 + MC7108).** The MC7108 receives power on/off data via its single cable link to the CR12. In addition, power control jacks provide the same capability when the units are not linked. A special multipin jack on the CR12 connects to the PC3 AC Power Controller, which coordinates power on/off of zone amps, audio sources, and video components.

**EXCLUSIVE MCINTOSH TONE CONTROLS (CR12).** Judicious use of well-designed bass and treble controls can compensate for acoustical irregularities. Each zone of the CR12 has its own bass and treble control that offers ±12dB adjustments with fine resolution, yet in the "flat" position is *completely* removed from the signal path.

**MATCHED AND BUFFERED VIDEO SWITCHING (CR12).** High-resolution video sources such as DVDs demand high-quality video switching. Each CR12 video input is terminated with 75 ohms to maintain a proper impedance match. Video buffer amplifiers feed the CR12's monitor video output, ensuring no loss in picture quality. In addition, the input buffers feed a line-matched signal to the individual video outputs, preventing signal degradation if those sources are in turn fed to another CR12 or a master preamp.

**BALANCED CONNECTIONS (CR12).** Balanced connections guard against induced noise and allow long cable runs without compromising sound quality. The CR12's four balanced outputs can be used to feed larger power amps (such as the MC162) for installations that require high sound levels.

**CONFIGURABLE POWER OUTPUT (MC7108).** Channels 1/2, 3/4, 5/6, and 7/8 can be operated either in the normal mode (40W x 8) or with each channel pair independently bridged (100W x 4). Configurations of 7, 6, 5, and 4 channels are also possible. For example, a 5-channel configuration for home theater would comprise three bridged channel pairs plus two normal channels, resulting in 100Wx3 for left/center/right speakers and 40Wx2 for the surround speakers.

**EXCLUSIVE MCINTOSH POWER ASSURANCE SYSTEM (MC7108).** 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 over-driven, 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

# About the CR12/MC7108 Companion Products

The McIntosh products shown at right are logical companions for the CR12/MC7108. Separate literature is available. Check with your McIntosh dealer for any late additions. McIntosh speaker systems are also covered in detail in separate literature.

**WK2, WK3, WK4 Keypad Controllers and R649 IR Sensor.** The wall-mount, illuminated keypads enable pushbutton operation and include IR sensors that relay commands from handheld remotes. The CR12 can accommodate as many as four keypads or IR sensors in each of its four zones. (See the separate McIntosh System Accessories literature for more on keypads and IR sensors.)

**RCT3 Remote Translator.** The Translator allows non-McIntosh components to be operated with a McIntosh IR remote or keypad controller. It connects to the data outputs on the CR12.

**HC1 Home Controller.** The HC1 connects to the CR12's HOME data output and allows remote operation of other home devices such as lights and movie screens.

**PC3 AC Power Controller.** The PC3 provides a total of 14 AC outlets (11 switched, 3 unswitched) for automatic AC control of zone amps, audio sources, and video components. It connects to a multipin jack on the CR12.

**PC4 AC Power Control.** 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.

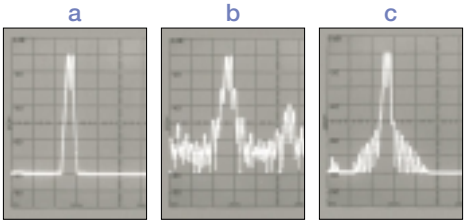
**MR7084 AM/FM Tuner with RAA1 Remote AM Antenna.** Likely to be the most-used source in a multizone system, the MR7084 tuner is a thoroughly engineered broadcast monitor that reveals the upper limits of AM and FM performance. The optional RAA1 antenna can be positioned away from sources of interference (e.g., TV sets, fluorescent lights) for greatly improved AM quality.

**MX132 A/V Control Center + Processor.** A single cable connection between the MX132 and the CR12 integrates a McIntosh home theater and multizone system. This lets the two systems share one group of source components. (The MX132 has a built-in AM/FM tuner and is supplied with the RAA1 antenna, obviating the need for the MR7084.)

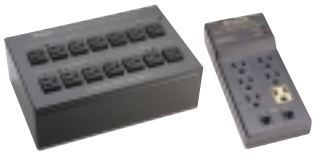
WK2, WK3, WK4 KEYPAD CONTROLLERS AND R649 IR SENSOR

RCT3 REMOTE TRANSLATOR

HC1 HOME CONTROLLER




The patented McIntosh Power Guard in the MC7108 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



PC3, PC4 AC POWER CONTROLLERS

MR7084 AM/FM TUNER

MX132 A/V CONTROL CENTER + PROCESSOR

# Featured Technologies (cont'd.)

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.

**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.

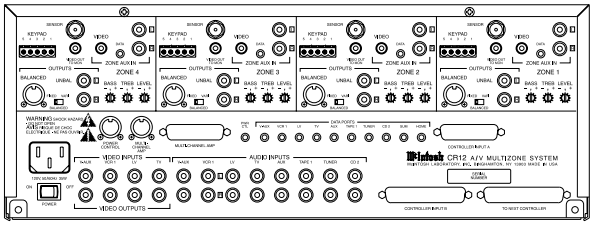

Most consumer electronics products are necessarily viewed as short-term investments because either they don't last or they quickly become obsolete in some way. *Coincidentally*, manufacturers supply a steady stream of "new-and-improved" products that you can buy. *Again*.

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.***

# CR12 Multizone A/V Control Center



## FEATURES

Multizone A/V Control Center

4 independent zones comprising 4 McIntosh A/V preamps

Single-cable connection to McIntosh MC7108 8-Channel Power Amplifier

Single-cable connection to a “master” preamp (e.g., to link CR12 multizone system to MX132-based home theater system)

Single-cable connections for cascading as many as six CR12s for a total of 24 independent zones

8 common (shared) sources (4 audio, 4 A/V)

1 additional local “private” A/V source for each zone

LED status indicators for all 4 zones

Programmable “wake-up” conditions for each zone

Output level trim for each zone (can also be used to set maximum permissible volume)

Exclusive McIntosh tone controls for each zone

Balanced outputs for each zone (fixed or variable)

Unbalanced outputs for each zone (variable)

Matched and buffered video switching

Control data output for source components

Remote operation of lights, screens, and drapes with McIntosh HC1 Home Controller

Remote power control

Selectable control priority for limiting operation from any zone

Accommodates as many as 4 keypads or IR sensors per zone

Front panel reset does not affect memory

Gold-plated input and output jacks

Modular construction with steel chassis

Glass front panel with illuminated nomenclature

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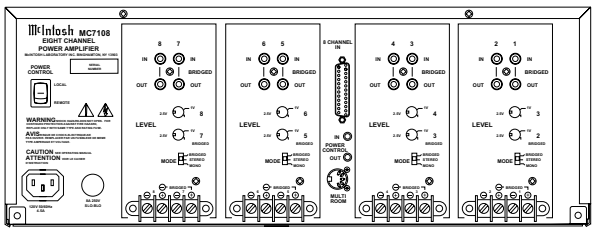
# MC7108 8-Channel Power Amplifier



## FEATURES

8-Channel Power Amplifier for multizone and home theater systems

Single-cable connection to CR12 Multizone A/V Control Center

8 x 40 watts (4 ohms) or 8 x 25 watts (8 ohms)

Any pair can be bridged for 1 x 100 watts (4 ohms)

Configurable to 7, 6, 5, or 4 channels

Theater power configuration: (3 x 100W) + (2 x 40W)

Wide power bandwidth

Ultra-low distortion

Exclusive McIntosh Power Assurance System:
- Power Guard® clipping protection
- Sentry Monitor® current protection
- Thermal Cutout
- Turn-On Delay
- Soft Start inrush protection

Low-noise toroid power transformer

Remote power control

Gold-plated high-current output terminals

Fanless convection cooling

Modular construction with steel chassis

Glass front panel with illuminated nomenclature

# CR12 Multizone A/V Control Center

## SPECIFICATIONS

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

**Rated Voltage Output**
2.5V

**Maximum Voltage Output**
8V from 20Hz to 20kHz

**Output Impedance**
600 ohms balanced and unbalanced

**Total Harmonic Distortion**
0.019% max. 20Hz to 20kHz
at rated output

**Input Sensitivity**
250mV for rated output

**Maximum Input Signal**
8V

**S/N Ratio (A-Weighted)**
90dB below rated output

**Input Impedance**
22k ohms

**Voltage Gain**
Input to variable outputs: 14dB
Input to fixed (balanced) outputs: 0dB

**Tone Controls**
Bass and treble ±12dB

**Power Requirements**
120V 50/60Hz, 25W

**Dimensions (h x w x d)**
inch: 7.062 x 17.5 x 20
cm: 17.9 x 44.5 x 50.8

**Weight**
15 lbs. (6.8kg) net
27 lbs. (12.2kg) shipping

# MC7108 8-Channel Power Amplifier

## SPECIFICATIONS

**RMS Power Output**
Min. sine wave continuous avg. output per channel with all channels operating:
Normal: 40 watts (4Ω) or 25 watts (8Ω)
Bridged: 100 watts (4Ω)
(Can also be configured for 7, 6, 5, or 4 channels)

**Output Load Impedance**
8 or 4 ohms

**Rated Power Band**
20Hz to 20kHz

**Peak Output Current**
> 10 amperes

**Total Harmonic Distortion**
0.005% max. at any level from 250mW to rated output from 20Hz to 20kHz

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

**Dynamic Headroom**
1.8dB

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

**Input Sensitivity**
1V (2.5V at gain control center detent)

**A-Weighted Signal-to-Noise Ratio**
92dB (112dB below rated output)

**Wide Band Damping Factor**
200 (8 ohms); 100 (4 ohms)

**Input Impedance**
20k ohms

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

**Power Requirements**
120V 50/60Hz, 4.5A

**Dimensions (h x w x d)**
inch: 7.062 x 17.5 x 20
cm: 17.9 x 44.5 x 50.8

**Weight**
40 lbs. (18.1kg) net
58 lbs. (26.4kg) shipping



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