

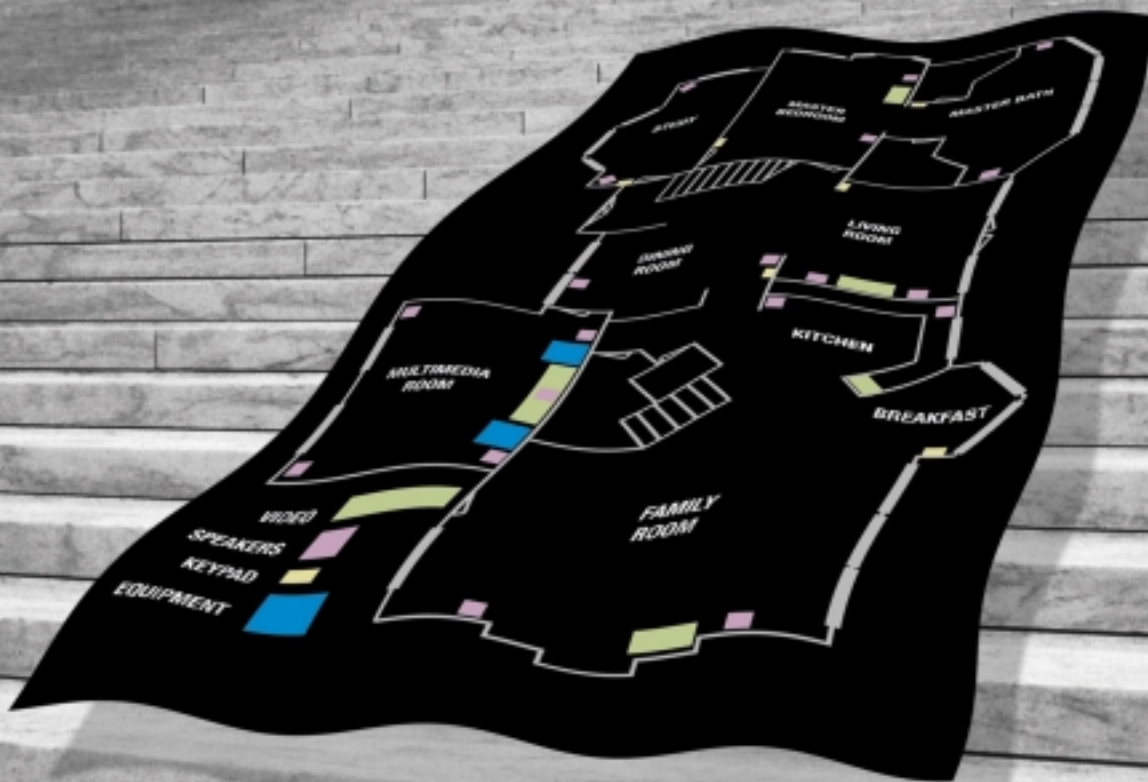
# McIntosh®

THE GREAT AMERICAN POWERHOUSE



CR16 Multizone A/V Control Center  
MC58 Eight-Channel Power Amplifier

**F**or 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 CR16 Multizone A/V Control Center and the MC58 8-Channel Power Amplifier go together like hand in glove, offering abundant possibilities for a house-wide entertainment system with true McIntosh performance.



## CR16

Multizone A/V Control Center



## MC58

Eight-Channel Power Amplifier



## Featured Technologies

**FOUR INDEPENDENT ZONES (CR16).** The CR16 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 CR16s can be linked (“cascaded”) for a total of 24 independent A/V zones.

**CONTROL DATA OUTPUTS (CR16).** To facilitate system integration, the CR16 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 (CR16 + MC58).** The MC58 receives power on/off data via its single cable link to the CR16. In addition, power control jacks provide the same capability when the units are not linked. A special multipin jack on the CR16 connects to the PC3 AC Power Controller, which coordinates power on/off of zone amps, audio sources, and video components.

**EXCLUSIVE MCINTOSH TONE CONTROLS (CR16).** Judicious use of well-designed bass and treble controls can compensate for acoustical irregularities. Each zone of the CR16 has its own bass and treble control that offers  $\pm 12\text{dB}$  adjustments with fine resolution, yet in the “flat” position is *completely* removed from the signal path.

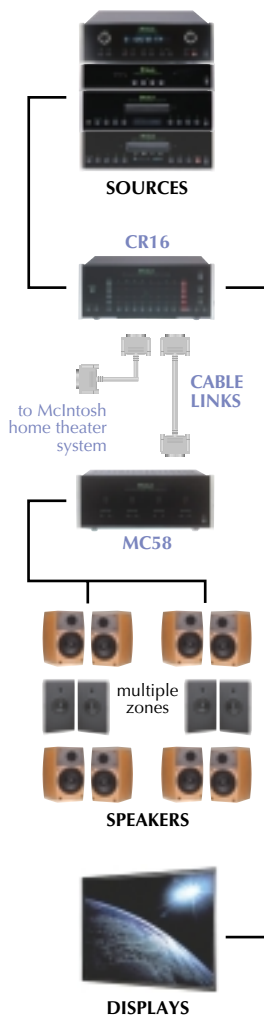
**MATCHED AND BUFFERED VIDEO SWITCHING (CR16).** High-resolution video sources such as DVDs demand high-quality video switching. Each CR16 video input is terminated with 75 ohms to maintain a proper impedance match. Video buffer amplifiers feed the CR16’s monitor video output, ensuring no loss in picture 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 CR16 or a master preamp.

**BALANCED CONNECTIONS (CR16).** Balanced connections guard against induced noise and allow long cable runs without compromising sound quality. The CR16’s four balanced outputs can be used to feed larger power amps (such as the MC202) for installations that require high sound levels.

**CONFIGURABLE POWER OUTPUT (MC58).** Channels 1/2, 3/4, 5/6, and 7/8 can be operated either in the normal mode (50W 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 50Wx2 for the surround speakers.

**EXCLUSIVE MCINTOSH POWER ASSURANCE SYSTEM (MC58).** 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



All it takes is one cable to join the CR16 and the MC58 (or MC7108) ... and one more to link a multi-zone system to a home theater.

The McIntosh products shown at right are logical companions for the CR16/MC58. Separate literature is available. Check with your McIntosh dealer for late additions.

**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 CR16 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.) In addition, an RS-232 port makes the CR16 compatible with popular touchscreen remotes from Crestron and Panja.

**RCT4 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 CR16.

**HC1 Home Controller.** The HC1 connects to the CR16'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 CR16.

**PC4 AC Power Control.** The PC4 provides five 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.

**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.

**MX132 A/V Control Center + Processor.** One cable from the MX132 to the CR16 will integrate a McIntosh home theater with a McIntosh multi-zone system. This lets the two systems share one group of source components.

**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. The compact **HT5** has a footprint less than 10 inches square. The **LS320** features arched bridge truss construction that is virtually immune to vibrations that distort sound. A special tweeter plate reduces edge diffraction cancellation and is mounted on traditional McIntosh screened black glass. The **WS320** is the wall-mount sibling of the LS320 and comes in a paintable white finish. At 400 watts, the **PS112** is McIntosh's most powerful amplified subwoofer. It features arched bridge truss construction and a screened black glass control panel.



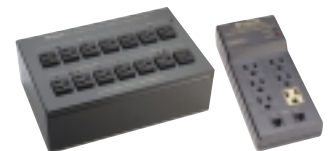
WK2, WK3, WK4 KEYPAD CONTROLLERS AND R649 IR SENSOR



RCT4 REMOTE TRANSLATOR



HC1 HOME CONTROLLER



PC3, PC4 AC POWER CONTROLLERS



MR85 AM/FM TUNER



HT5



LS320



WS320

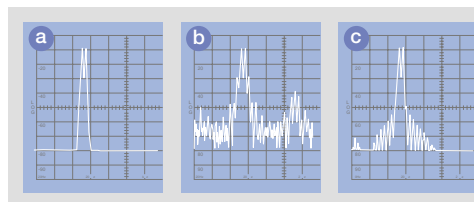


PS112

## Featured Technologies (cont'd.)

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.



The patented McIntosh Power Guard in the MC58 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

**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.

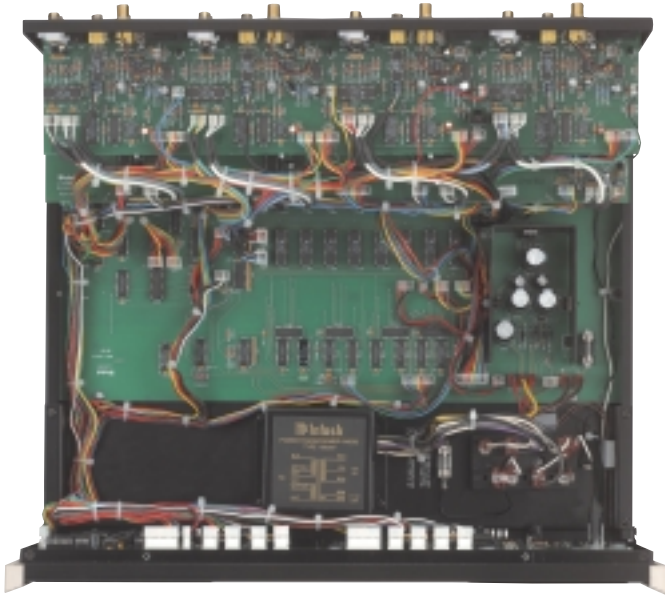
**Soft Start inrush protection.** Thermistors in the power transformer act as a cushion against inrush current, eliminating component stress during turn-on. Soft Start is one of many design details that contribute to the remarkable longevity of McIntosh equipment.

## 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.**

## CR16 Multizone A/V Control Center



### Multizone A/V Control Center

4 independent zones comprising 4 McIntosh A/V preamps  
Single-cable connection to McIntosh MC58 or MC7108  
8-Channel Power Amplifiers

Single-cable connection to a “master” preamp (e.g., to link CR16 multizone system to MX132-based home theater system)

Single-cable connections for cascading as many as six CR16s 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)

Buffered video outputs for each input

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

RS232 control for touchscreen system remotes

Front panel reset does not affect memory

Gold-plated input and output jacks

Modular construction with steel chassis

Glass front panel with illuminated nomenclature

## MC58 Eight-Channel Power Amplifier



8-Channel Power Amplifier for multizone and home theater

Single-cable connection to CR16 or CR12  
(additional line-level cables needed for CR10)

8 x 50 watts (4 ohms) or 8 x 30 watts (8 ohms)

Any pair can be bridged for 1 x 100 watts (8 ohms)

Configurable to 7, 6, 5, or 4 channels

Theater power configuration: (3 x 100W) + (2 x 50W)

High output current capability

Wide power bandwidth, ultra-low distortion

Exclusive McIntosh Power Assurance System:

- Power Guard® clipping protection
- Sentry Monitor® current protection
- Thermal Cutout
- Turn-On Delay

Remote power control

Gold-plated high-current output terminals

Fanless convection cooling

Modular construction with steel chassis

Glass front panel with illuminated nomenclature

## CR16 Multizone A/V Control Center



### Frequency Response

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

### Rated Voltage Output

1.25V

### Maximum Voltage Output

6V from 20Hz to 20kHz

### Total Harmonic Distortion

0.01% max. from 20Hz to 20kHz at rated output

### Input Sensitivity

0.250V for 1.25V rated output

### Maximum Input Signal

8Vrms

### S/N Ratio (A-Weighted)

90dB below rated output

### Voltage Gain

Input to variable outputs: 14dB

### Tone Controls

Bass and treble  $\pm$ 12dB

### Power Requirements

120V 50/60Hz, 35W

### 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. (18.2kg) boxed



## MC58 Eight-Channel Power Amplifier



### RMS Power Output

Min. sine wave continuous avg. output per channel with all channels operating:  
Normal: 50 watts (4 $\Omega$ ) or 30 watts (8 $\Omega$ )  
Bridged: 100 watts (8 $\Omega$ )  
(Can also be configured for 7, 6, 5, or 4 channels)

### Output Load Impedance

Normal - 8 or 4 ohms  
Bridged - 8 ohms

### Rated Power Band

20Hz to 20kHz

### Total Harmonic Distortion

0.005% max. at any level from 250mW to rated output from 20Hz to 20kHz with all channels operating

### 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)

### 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

### Dimensions (h x w x d)

inch: 7.062 x 17.5 x 20  
cm: 17.9 x 44.5 x 50.8

### Weight

72 lbs. (32.7kg) boxed

