

McIntosh®
THE GREAT AMERICAN POWERHOUSE



MX132 A/V Control Center + Processor
MC7205 5-Channel Power Amplifier

McINTOSH HOME THEATER

McINTOSH HOME THEATER

The awesome sonic potential of DVD movies with Dolby Digital® practically begs for McIntosh-quality reproduction. The MX132 and MC7205 are the foundation for a powerful and engaging home theater experience. The MX132 features the absolute finest digital processing engine available for surround sound. As the “brains” of a home theater system, its roster of capabilities may astonish even the most jaded scorekeepers. The MX132 is logically organized, handles audio and video signals in purist fashion, and integrates elegantly with other McIntosh systems and components.



MX132

A/V Control Center + Processor



MC7205

5-Channel Power Amplifier



Featured Technologies

24-BIT SIGNAL PROCESSING (MX132). The MX132 features one of the most powerful DSP engines available. Three Motorola 24-bit digital signal processors decode Dolby Digital®, Pro Logic, and DTS® soundtracks. One divides a digital bit stream into the Dolby Digital and Pro Logic channels. Another is dedicated to decoding DTS. The third handles bass-channel management as well as ancillary functions. Except in pure Stereo mode, all analog inputs are processed by a 24-bit stereo A/D converter. Three additional 24-bit D/A converters handle the DSP output.

HOME THX® CINEMA (MX132). Speaker Position Time Synchronization and Dynamic Decorrelation – two THX enhancements for Dolby Digital – optimize sound in rooms lacking proper speaker locations.

TRIM SELECT (MX132). Settings for subwoofer, surround speakers, center speaker, treble, bass, loudness, and display can be adjusted using the TRIM LEVEL knob or via remote. The settings are shown on the MX132's large display. For each operating mode only the appropriate trim options can be accessed.

ON-SCREEN SETUP (MX132). All speaker size selection, room calibration, and custom sound enhancement features can be set from the listening position via remote control.

CONTROL DATA OUTPUTS (MX132). To facilitate system integration, the MX132 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 (MX132 + MC7205). The MC7205 receives power on/off data via its cable link to the MX132. In addition, power control jacks provide the same capability when the units are used independently. A special multipin jack on the MX132 connects to the PC3 AC Power Controller (see "Companions" section).

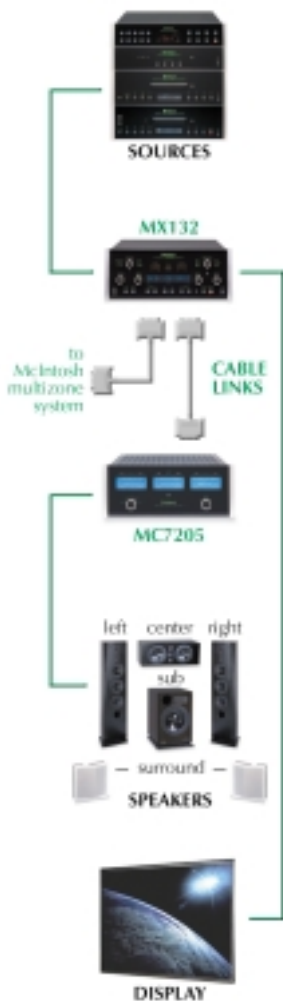
SUPER-TRACKING VOLUME CONTROL (MX132). Level differences among channels in a stereo or surround system compromise sound imaging. The MX132 uses an electronic volume control with tracking accuracy better than 0.5dB for all six channels.

ACTIVE VARIABLE LOUDNESS COMPENSATION (MX132). Typical loudness circuits apply a fixed amount of compensation for listening at low volume. The MX132 includes a separate loudness circuit that applies compensation proportionately. When off, the loudness circuit elements are completely removed from the signal path.

MATCHED AND BUFFERED VIDEO SWITCHING (MX132). High-resolution video sources such as DVDs demand high-quality video switching. Each MX132 video input is terminated with 75 ohms to maintain a proper impedance match. Video buffer amps feed the two monitor video outputs, ensuring no loss in picture quality. Built-in digital comb filters convert composite video to S-video, allowing use of S-video outputs for all video sources.

AUTOMATIC INPUT LEVEL CONTROL (MX132). The analog input to the DSP features a circuit similar to the Power Guard® used in McIntosh amplifiers. AILC continuously monitors input voltage and if overdrive occurs reduces the input level, preventing distortion.

BALANCED CONNECTIONS (MX132 Zone B). A balanced connection provides 40dB more noise protection than an unbalanced connection. The balanced output of the MX132's Zone B allows distant placement of a Zone B amp without compromising sound.



All it takes is one cable to join the MX132 and the MC7205... and one more to link a home theater to a multizone system.

About the MX132/MC7205 Companion Products

The McIntosh products shown at right are logical companions for the MX132/MC7205. Separate literature is available. Check with your McIntosh dealer for any late additions. McIntosh speaker systems are also covered in detail in separate literature.

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 MX132.

RFD2 AC-3 RF Demodulator. The RFD2 is required when connecting a laser disc player with a Dolby Digital RF output to the MX132.

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 MX132 or the CR12.

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 MX132's HOME data port and allows remote operation of other home devices such as lights and movie screens.

MC162 Power Amplifier. The MC162 is a good choice as a Zone B amplifier because it can form a balanced connection with the MX132, permitting a long cable run without degrading the sound. In bridged mode an MC162 will deliver 500 watts to the HT2 subwoofer (see below), resulting in deep, well-controlled bass that will satisfy even large home theaters.

WK3 and WK4 Keypad Controllers. These can be used to operate Zones A and B of the MX132.

CR12 Multizone A/V Control Center. A single cable connects the MX132 and the CR12, allowing integration of a McIntosh home theater and multizone system. This lets the two systems share one group of source components, including the MX132's built-in AM/FM tuner.

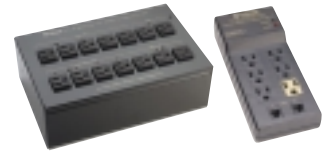
HT Series Loudspeakers. These THX®-certified speakers deliver a musical, non-fatiguing sound not often heard from home theater speakers. The HT1 can be used for all three front channels or with the compact HT4 in the center. The rear-channel HT3F dipoles mount flush to a wall or ceiling and are also available in an on-wall version (HT3W). The HT2 passive subwoofer uses two 12-inch LD/HP® drivers and can be driven by the potent MC162 in bridged mode.



RCT3 REMOTE TRANSLATOR



RFD2 AC-3 RF DEMODULATOR



PC3, PC4 AC POWER CONTROLLERS



HC1 HOME CONTROLLER



MC162 POWER AMPLIFIER
(FOR ZONE B)



WK3, WK4 KEYPAD CONTROLLERS



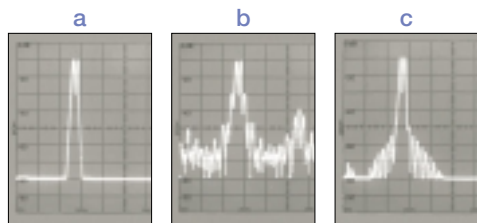
CR12 MULTIZONE A/V
CONTROL CENTER



HT1 HT1



HT2 HT3F HT3F



The patented McIntosh Power Guard in the MC7205 provides real-time clipping protection without affecting power output or sound quality.

- a) test signal
- b) overdriven amp without Power Guard produces SEVERE clipping distortion
- c) overdriven amp with Power Guard produces NO clipping distortion

Featured Technologies (cont'd.)

EXCLUSIVE MCINTOSH POWER ASSURANCE SYSTEM (MC7205). Power Assurance is a collection of technologies that enhance performance and reliability and protect the amp and speakers.

Power Guard® clipping protection. Power Guard ensures that the amplifier will always deliver full power without causing clipping distortion. If an amplifier channel is overdriven, 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 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.

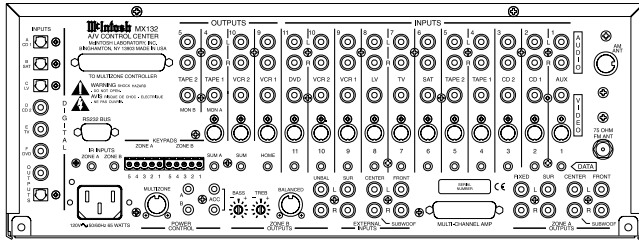
Thermal Cutout. If the cooling air is blocked and the power transistors become too hot, thermal cutouts protect against overheating until the amp cools.

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.

ILLUMINATED PEAK-RESPONDING METERS (MC7205). 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. In the MC7205, a four-position switch selects the channels to be monitored by the three meters. When the MC7205 and MX132 are linked via the single cable connection, the correct meter mode is selected automatically. The meter illumination can also be switched off.

MX132 A/V Control Center + Processor



FEATURES

A/V Control Center + Processor

Single-cable connection to McIntosh MC7205

5-Channel Power Amplifier

Single-cable connection to McIntosh CR12 Multizone A/V Control Center (MX132 becomes “master” preamp)

24-bit DSP Dolby Digital®, Pro Logic, and DTS® decoders

24-bit D/A converters

24-bit A/D conversion of analog source signals

THX® ULTRA certified

Home THX Cinema enhancements

Switchable dynamic compressor for “late night” Dolby Digital

Stereo mode (no DSP) for 100% pure analog sound

Built-in AM/FM tuner with high-performance RAA1 remote AM antenna

11 audio and video source selections with re-assignable naming

6 digital audio inputs (can create a digital processor loop)

2 digital outputs (can connect to a CD recorder or external processor)

Automatic Input Level Control (AILC)

Precision volume control

Active Variable Loudness Compensation

Control data output for source components

Matched and buffered video switching

S-video and composite video connections with composite-to-S converter

Automatic mode switching between Dolby Digital, Pro Logic, and DTS

Auto-memory recall of last mode setting for each input

LED indicators for mode and speaker configuration

Internal signal source for system calibration

On-screen assistance for speaker size, room calibration, and sound enhancements

On-screen adjustable 6-speaker time delay (Speaker Position Time Synchronization)

Remote control of all mode and trim settings for easy setup and calibration

Permanent (non-volatile) memory of all system settings

Independent listen and record selection

Dual-zone operation using record selection for Zone B

Independent remote control of Zones A and B

Independent bass, treble, and output level trim for Zone B

Balanced audio outputs for Zone B

Keypad controller connections (also compatible with Xantech sensors)

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

Remote power control

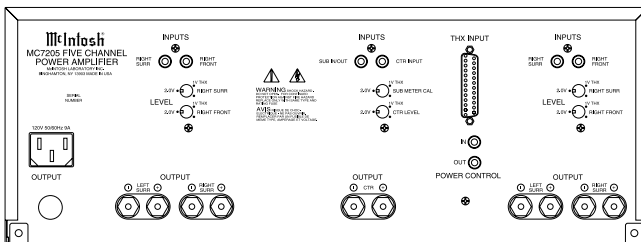
Gold-plated input and output jacks

Modular construction with steel chassis

Glass front panel with illuminated nomenclature

Infrared remote control

MC7205 5-Channel Power Amplifier



FEATURES

5-channel power amplifier for home theater and music

Single-cable connection to McIntosh MX132

5 x 200 watts (4 ohms) or 5 x 120 watts (8 ohms)

Lucasfilm® Home THX® certified

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

Illuminated peak-responding meters (3) with 4-position monitoring switch and auto mode selection with MX132

Remote power control

Low-noise toroid power transformer

Gold-plated high-current output terminals

Fanless convection cooling

Modular construction with steel chassis

Glass front panel with illuminated nomenclature

MX132 A/V Control Center + Processor



SPECIFICATIONS

Frequency Response

Mono and stereo:

L, C, R channels (large speakers)
20Hz to 20kHz, +0 / -0.5dB

Dolby Pro Logic:

L, C, R channels
20Hz to 20kHz, \pm 0.5dB
LS, RS channels
20Hz to 7kHz, +0 / -3dB

Dolby Digital, DTS, and ext. processor input:

L, C, R and LS, RS channels
20Hz to 20kHz, +0 / -0.5dB
Subwoofer channel, low pass
10Hz to 80Hz corner frequency with 24dB per octave rolloff

All modes:

Subwoofer channel, low pass
10Hz to 80Hz corner frequency with 24dB per octave rolloff
Note: High pass rolloff is 12dB per octave when using small speakers

Rated Voltage Output

2Vrms

Maximum Voltage Output

9.5Vrms

Output Impedance

47 ohms

Total Harmonic Distortion

0.005% max. all channels from 20Hz to 20kHz

Input Sensitivity

Line level: 400mV
Dolby level: 200mV input
External processor ref. level: 200mV input

Maximum Input Signal

High level: 6V

S/N Ratio (A-Weighted)

100dB (> 90dB below ref. level)

Input Impedance

High level: 22k ohms

Voltage Gain

High level to tape: 0dB
High level to main: 14dB

Tone Controls

Bass and treble: \pm 12dB

FM SECTION

Useable Sensitivity

14dB (1.4uV across 75 Ω)

50dB Quieting Sensitivity

Mono: 19dB (2.4uV across 75 Ω)
Stereo: 35dB (15uV across 75 Ω)

Signal-to-Noise Ratio

Mono: 75dB • Stereo: 70dB

Frequency Response

Mono: 20Hz to 15kHz, +0 / -1dB
Stereo: 20Hz to 15kHz, +0 / -1dB

Harmonic Distortion

Mono: 0.3% @ 100Hz 0.45% @ 100Hz
0.3% @ 1kHz 0.45% @ 1kHz
0.3% @ 10kHz 0.65% @ 10kHz

Intermodulation Distortion

Mono: 0.25%
Stereo: 0.45%

Capture Ratio

1.2dB

Alternate Channel Selectivity

75dB

Spurious Response Rejection

100dB

Image Rejection

75dB

RF Intermodulation

65dB

Stereo Separation

45dB at 100Hz
50dB at 1kHz
35dB at 10kHz

SCA Rejection

65dB

AM SECTION

Sensitivity

20uV (ext. ant., 50 Ω signal source)

Signal-to-Noise Ratio

48dB at 30% modulation
58dB at 100% modulation

Harmonic Distortion

0.5% maximum at 50% modulation

Frequency Response

50Hz to 6kHz NRSC

Adjacent Channel Selectivity

45dB minimum IHF

Image Rejection

65dB minimum from 540kHz to 1600kHz

IF Rejection

80dB minimum

GENERAL

Power Requirements

120V 50/60Hz, 65W

Dimensions (h x w x d)

inch: 7.125 x 17.5 x 21
cm: 18.1 x 44.5 x 53.2
knob clearance: 1.125" (2.9 cm)

Weight

32.5 lbs. (14.8kg) net
53.5 lbs. (24.3kg) shipping

MC7205 5-Channel Power Amplifier



SPECIFICATIONS

RMS Power Output

200W (4 Ω) or 120W (8 Ω) min. sine wave continuous average power output per channel with all channels operating

Output Load Impedance

8 or 4 ohms

Rated Power Band

20Hz to 20kHz

Peak Output Current

> 25 amperes

Total Harmonic Distortion

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

Intermodulation Distortion

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

Dynamic Headroom

1.6dB

Frequency Response

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

Input Sensitivity

1V (2.0V at gain center detent)

S/N Ratio (A-Weighted)

113dB below rated output

Wide Band Damping Factor

200 (8 Ω)
100 (4 Ω)

Input Impedance

10k ohms

Power Guard®

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

Power Requirements

120V 50/60Hz, 1080W

Dimensions (h x w x d)

inch: 7.062 x 17.5 x 21
cm: 17.9 x 44.5 x 53.3
knob clearance: 1.125" (2.9 cm)

Weight

53 lbs. (24.1kg) net
72 lbs. (32.7kg) shipping

