

# McINTOSH BUILDS *The* BEST COMPACT AMPLIFIER!

When you need high power at very low distortion in a small, compact, light weight, reliable power amplifier then you need the MC 502 McIntosh.

The values to look for when looking for a power amplifier are:

1. QUALITY CONSTRUCTION
2. RELIABILITY
3. DESIGN EXCELLENCE
4. MECHANICAL STRENGTH
5. ELECTRICAL VERSATILITY
6. CONVENIENCE OF OPERATION
7. STABILITY
8. SUPERIOR PERFORMANCE

The McIntosh MC 502 power amplifier is probably the most compact source of very low distortion stereophonic power in existence. It is truly unique. More than any other amplifier it provides very low distortion stereo power, more sophisticated yet practical protection, and more bandwidth in a amazingly small yet reliable package. For example: The MC 502 weighs only 27 pounds yet it can deliver 75 watts per channel into 2.7 to 4 ohms loudspeakers, sine wave, continuous average power at less than .02% distortion, harmonic or intermodulation from 20 Hz to 20K Hz.

There are three protection circuits which contribute to the reliability, long life, and excellent performance of the MC 502. The first control circuit is the Sentry Monitor which senses and confines current and voltage conditions to the safe operating characteristics of the output stage power transistors. Power Guard is the second control circuit. Power Guard eliminates amplifier output clipping. Amplifiers are capable of delivering large quantities

of power when they are driven to clipping. Clipping is caused when the amplifier is asked to produce more power output than it can deliver with low distortion. A clipped amplifier can have more than 40% harmonic distortion. The extra energy content of the clipped signal will damage most loudspeakers, particularly delicate high frequency tweeters. This new McIntosh advancement helps protect your speakers from this kind of damage. Power Guard does not limit the dynamic range or the power output of the power amplifier. The third control circuit is the speaker protection and turn on delay arrangement. The Sentry Monitor, Power Guard, and speaker protector circuits were developed by McIntosh engineers and are each covered by U.S. patents assigned to McIntosh Laboratory.

The cubical content of the amplifier chassis is less than 513 cubic inches and yet at full continuous sine wave output the entire structure is cool, a really effective example of thermal engineering. It is this kind of thermal transfer designing that makes possible the fabulous reliability of McIntosh products and the MC 502 is an outstanding example of McIntosh engineering talent and achievement.

**Of all the good equipment manufactured today, only McIntosh amplifiers offer lowest distortion, high reserve power, long life, trouble free performance and highest value. For more than 20 years McIntosh has been recognized as the leader. Continuous major investment in engineering and development provides you with conservative use of the newest and best in solid state physics and space age technology.**



**THE MC 502** Shown in optional walnut veneer cabinet.



# MC 502 Performance Limits

## PERFORMANCE LIMITS

Performance limits are the maximum deviation from perfection permitted for a McIntosh instrument. We promise you that when you purchase a new MC 502 from a McIntosh Franchised dealer it will be capable of performance at or exceeding these limits or you can return the unit and get your money back. McIntosh is the only manufacturer that makes this statement.

## PERFORMANCE

McIntosh audio power ratings are in accordance with the Federal Trade Commission Regulation of November 4, 1974 concerning power output claims for amplifiers used in home entertainment products.

## POWER OUTPUT

### STEREO:

75 watts into 2.7 to 4 ohm loads, 50 watts into 8 ohms loads, minimum sine wave continuous average power output per channel from 20Hz to 20,000Hz, both channels operating.

Which is: 14.2 volts RMS across 2.7 ohms

17.3 volts RMS across 4 ohms

20.0 volts RMS across 8 ohms

### MONO (Bridged):

150 watts into an 8 ohm load, minimum sine wave continuous average power output from 20Hz to 20,000Hz.

Which is: 34.6 volts RMS across 8 ohms.

## OUTPUT LOAD IMPEDANCE

### STEREO:

2.7 ohms to 8 ohms.

### MONO:

8 ohms obtained by connecting across the output terminals of both channels.

## RATED POWER BAND

20Hz to 20,000Hz

## TOTAL HARMONIC DISTORTION

### STEREO:

0.02% maximum harmonic distortion at any power level from 250 milliwatts to rated power per channel from 20Hz to 20,000Hz, both channels operating.

### MONO:

0.02% maximum harmonic distortion at any power level from 250 milliwatts to rated power from 20Hz to 20,000Hz.

## INTERMODULATION DISTORTION

### STEREO:

0.02% maximum intermodulation distortion at any power level from 250 milliwatts to rated power per channel both channels operating for any combination of frequencies, 20Hz to 20,000Hz.

### MONO:

0.02% maximum at any power level from 250 milliwatts to rated power for any combination of frequencies, 20Hz to 20,000Hz.

## FREQUENCY RESPONSE

20Hz to 20,000Hz +0, -0.25dB at rated power  
10Hz to 100,000Hz +0, -3.0dB at rated power

## HUM AND NOISE

95dB below rated output

## RATINGS

### OUTPUT VOLTAGES

25 volts for distribution lines

### DAMPING FACTOR

Greater than 50

### INPUT IMPEDANCE

75,000 ohms

### INPUT SENSITIVITY AND IMPEDANCE

Switchable: 0.75 volt or 2.5 volts-Level control provided for higher input voltages.

### POWER REQUIREMENT

120 Volts, 50/60Hz, 0.2 to 4 amperes (20 to 400 watts).

### MECHANICAL INFORMATION

**SIZE:** Front panel measures 16 inches wide (40.6cm) by 3-5/8 inches high (9.2cm). Chassis measures 14-3/4 inches wide (37.5cm) by 2-3/8 inches high (6.0cm) by 14-1/2 inches deep (36.8cm), including connectors. Knob clearance required is 1-1/4 inches (3.2cm) in front of the mounting panel.

**FINISH:** Front panel is anodized gold and black with special gold/teal nomenclature illumination. Chassis is black.

**WEIGHT:** 27 pounds (12.2kg) net. 38 pounds (17.2kg) in shipping carton.

FRANCHISED DEALER

# McIntosh

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The continuous improvement of its products is the policy of McIntosh laboratory incorporated, who reserves the right to improve design without notice.