

MODEL C-4
EQUALIZER PRE-AMPLIFIER

*a low distortion
control center
for your home
music system*



An equalizer Pre-Amplifier is the control center of the sound reproducing system. *Low distortion, stability, and adequate frequency response* are as important in the Equalizer Pre-Amplifier as in the power amplifier. The McIntosh C-4 provides these vital features. Circuit arrangement and techniques bring complete freedom from impulse types of distortion. (Turning the unit on and off or changing the level suddenly will not cause amplifier flutter.) There are five input channels, two of which are equalized for use with magnetic cartridges. Stable feedback amplification permits full adjustment of either the treble or bass controls without any amplifier instability whatsoever.

C-4 without wood cabinet	\$64.50
C-4M with Mahogany cabinet	72.50
C-4B with Blonde cabinet	72.50
C-4P self-powered C-4	75.50
C-4PB same, with Blonde cabinet	83.50
C-4PM same, with Mahogany cabinet	83.50

- Bass Accentuate and Attenuate
- Treble Accentuate and Attenuate
- Eleven position Bass and Treble compensation switch for magnetic or constant amplitude cartridges
- Master on-off switch and volume control

Delivers 4 volts at less than 0.3% distortion, 20-20,000 cycles, at any settings. Bass accentuate 18db, attenuate 20db (20 cycles); Treble accentuate 17db, attenuate 20db (20,000 cycles). Five input channels: tape, tuner, microphone and two phonograph. Separate level adjustment on each channel. Variable load and magnetic-constant amplitude switch on one phono channel. Two main and one tape output, each from a cathode follower. Three A. C. outlets controlled by master on-off switch. Size: 11 1/4" x 7 3/4" x 4 7/8" with hardwood enclosure. Control unit: 10 1/8" x 7 1/2" x 3 7/8". Front panel size: 11" x 4 1/4". (Sizes do not include cable clearances.) Powered by any McIntosh power amplifier or self-powered with D-8A power supply. Hum level—110 db referred to input.

Back panel features identical with C-8.

EXPORT SHIPPING DATA						
Equipment	Net Weight (Includes Tubes, Connectors, etc.)		Gross Weight		Dimensions Unpacked (Includes Cable Clearance)	Dimensions Packed
	Pounds	Kilos	Pounds	Kilos		
C-8	6 lbs., 14.4 oz.	3.13 K	8 lbs., 1.6 oz.	3.67 K	10 1/8 x 9 x 3 7/8	13 3/8 x 13 x 5
C-8M or C-8B	9 lbs., 6.4 oz.	4.26 K	12 lbs., 4 oz.	5.55 K	11 1/2 x 9 x 4 7/8	C-8 13 3/8 x 13 x 5 L-112 14 1/2 x 10 3/4 x 5 3/4
C-8P	10 lbs., 4 oz.	4.65 K	11 lbs., 6.4 oz.	5.17 K	C-8 10 1/8 x 9 x 3 7/8 D-8 6 x 4 7/8 x 2 1/4	13 3/8 x 13 x 5
C-8PM or C-8PB	12 lbs., 8.4 oz.	5.68 K	15 lbs., 6.4 oz.	6.99 K	C-8M 11 1/2 x 9 x 4 7/8 D-8 6 x 4 7/8 x 2 1/4	C-8P 13 3/8 x 13 x 5 L-112 14 1/2 x 10 3/4 x 5 3/4
C-4	5 lbs., 9 oz.	2.52 K	7 lbs., 4 oz.	3.29 K	10 1/8 x 9 x 3 7/8	13 3/8 x 13 x 5
C-4M or C-4B	8 lbs., 11.26 oz.	3.95 K	11 lbs., 3 1/2 oz.	5.1 K	11 1/2 x 9 x 4 7/8	C-4 13 3/8 x 13 x 5 L-112 14 1/2 x 10 3/4 x 5 3/4
C-4P	8 lbs., 14.6 oz.	4.04 K	10 lbs., 10 oz.	4.82 K	C-4 10 1/8 x 9 x 3 7/8 D-8 6 x 4 7/8 x 2 1/4	13 3/8 x 13 x 5
C-4PM or C-4PB	12 lbs., .86 oz.	5.46 K	14 lbs., 9 1/2 oz.	6.62 K	C-4M 11 1/2 x 9 x 4 7/8 D-8 6 x 4 7/8 x 2 1/4	C-4P 13 3/8 x 13 x 5 L-112 14 1/2 x 10 3/4 x 5 3/4
MC-30	30 lbs., 8 oz.	13.8 K	34 lbs., 3.2 oz.	15.5 K	13 1/8 x 8 x 8	15 1/4 x 10 x 9 3/8
MC-60	42 lbs., 13.5 oz.	19.4 K	47 lbs., 9.5 oz.	21.6 K	14 1/4 x 10 x 8	15 1/2 x 12 1/4 x 10 1/2
D-1*	2 lbs., 12 oz.	1.25 K	3 lbs., 5 oz.	1.5 K	6 x 4 7/8 x 2 1/4	7 x 5 3/4 x 5 3/8
L-112**	2 lbs., 8 oz.	1.13 K	3 lbs., 15.6 oz.	1.8 K	11 1/2 x 7 3/4 x 4 7/8	14 1/2 x 10 3/4 x 5 3/4

*General purpose power supply for earlier models. **Blonde or Mahogany cabinet for C-8 or C-4.



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McIntosh

LABORATORY, INC.

brings you

99⁶⁰/₁₀₀ % * PERFECT AMPLIFICATION

The 30 watt Amplifier model MC-30

- ✓ Featuring the patented McIntosh Circuit
- ✓ Guaranteed 0.5% maximum intermodulation distortion
- ✓ Unity Coupling for performance plus
- ✓ Beautifully Styled in Black and Chrome
- ✓ Zero VU Line Level or any Tuner will drive to full output



\$143.50

*All but 0.000016 of power output is a perfect reproduction of input signal at 30 watts, 20-20,000 cycles.

McIntosh, the world's most advanced amplifier, is unequalled for quality reproduction of any sound source. Its unique circuitry provides ample reserve power combined with unprecedented low distortion—less than 0.5% harmonic distortion at all frequencies, 20-20,000 cycles and at any volume, even full power!

Designed for those who expect the finest, the McIntosh MC-30 sets a new standard among amplifiers today. It brings an almost unbelievable clarity of tone—clean, pure living sound. Most important, you can listen to the McIntosh for hours without listening fatigue or irritation. For performance that really makes a difference, enjoy the McIntosh, masterfully crafted for your lifetime satisfaction.



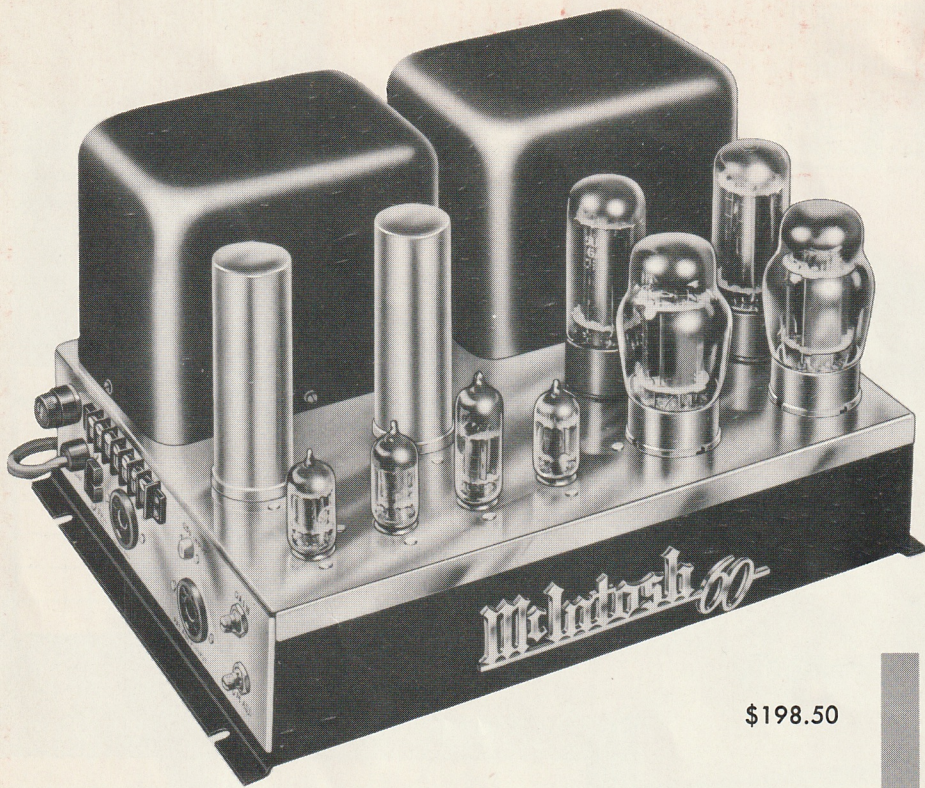
WHY THE EXCLUSIVE PATENTED McIntosh CIRCUIT brings you purest high-fidelity sound . . .

The McIntosh circuit is fundamentally new. It provides practically 100% coupling between primary windings of the output transformer, by winding the primary wires together, or bifilarly. The high efficiency of class "B" amplification can be used for the first time with high quality performance. Wave form distortion, causing listening irritation, due to switching transients between each half of the class "B" amplifier is eliminated at all frequencies.

Before 1947, truly faithful amplified sound was severely limited by: (1) too much distortion; and (2) not enough power capacity. With the invention of the McIntosh circuit, less than 1% distortion became the performance standard which engineers everywhere had been striving to attain.

The McIntosh has an inherent large advantage over conventional circuits. By bringing the output tubes electrically four times closer together the impedance is $\frac{1}{4}$ that of the conventional circuit. The coupling to the secondary is improved by a similar factor of 4 to 1 since the primary to secondary turns ratio has been reduced 2 to 1. The $\frac{1}{2}$ cathode, $\frac{1}{2}$ plate loading provides a feedback factor of 12 db, which with additional loop feedback, offers the lowest distortion, most stable power amplifier made.

To date, McIntosh amplifiers *alone* are able to provide less than 0.5% of 1% harmonic distortion and less than 0.5% of 1% intermodulation distortion (discordant distortion), for any frequency or combination of frequencies, throughout the audible range, even at full power output.



\$198.50

For those satisfied with nothing but the ultimate in high fidelity, it's the McIntosh 60 watt amplifier—unsurpassed for performance and quality.

This unique instrument sets a standard of excellence in amplification, for it has reached the theoretical limit of quality and efficiency. The McIntosh MC-60 amplifier, with patented circuit, is the only power amplifier which will produce 60 watts of power at less than 0.5% distortion from 20 to 20,000 cycles per second. This measurement insures the complete absence of discordant tones, and provides the purest and most nearly perfect amplification available. There is no increase in distortion even when extra power is demanded by program material. Since nothing is added to or taken from the input signal, clean, unparalleled reproduction of sound results, bringing out an exquisite realism at low, as well as high, volume levels . . . clear lucid highs, with no peaking; natural, full bass with no booming; thrilling middle range, all there with the McIntosh.

In reproducing music or speech with complete realism, the exceptional reserve power capacity of the MC-60 is called upon, for many short intervals per second, even at moderate volume, to re-create faithfully and accurately all the fundamentals, harmonics and overtones present in natural sounds.

The performance graph shown below, to which every unit is tested, is your guarantee of freedom from listening fatigue—of more listening pleasure, of full dynamic range and of complete realism in reproduced music.

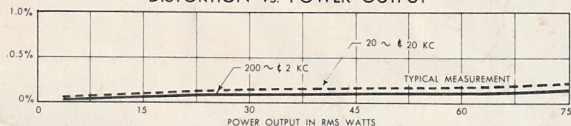
McIntosh

60 watt AMPLIFIER MC-60

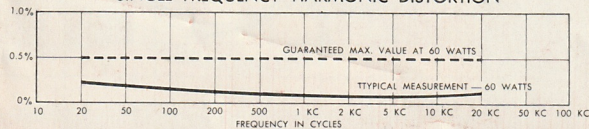
SPECIFICATIONS

POWER SUPPLY: 117/125 volts, 50/60 cycles.
 POWER CONSUMPTION: 280 watts at 60 watts output; 155 watts at zero signal output. POWER OUTPUT: 60 watts continuous. INPUT LEVEL: Input #1 .5 volts to 30 volts, with gain control. Input #2 2.5 volts (for use with McIntosh Pre-Amps). FREQUENCY RANGE: 20 to 30,000 cycles ± 1 db at 60 watts output; 16 to 60,000 cycles ± 5 db at 60 watts output; 10 to 100,000 cycles ± 1.0 db at 30 watts output. HARMONIC DISTORTION: Less than 0.3% at 60 watts output or less, 20 to 20,000 cycles. INTERMODULATION DISTORTION: Less than 0.5% if instantaneous peak power is below 120 watts. IMPULSE DISTORTION: Negligible. NOISE AND HUM LEVEL: 90 db or more below rated output. DAMPING FACTOR: 15 or better for 4, 8, and 16 ohm output, 20 for 600 ohms. INPUT IMPEDANCE: 0.5 meg for 0.5 volt input and 0.13 meg for 2.5 volt input. 20 cycles to 40 Kc. OUTPUT IMPEDANCE: 4, 8, 16 and 600 ohms (600 ohm is balanced to ground). PHASE SHIFT: $\pm 8^\circ$ 20-20,000 cycles. TUBE COMPLEMENT: Rectifier: 2-5U4GA; Pre-Amp.; 12AX7; Phase Inverter: 12AU7; Voltage Amp: 12BH7; Driver: 12AX7; Output: 2-6550. AUXILIARY EQUIPMENT CONNECTION: Designed to power C-4, C-8 and other McIntosh pre-amplifiers. SIZE: 14 1/4" x 10" x 8" high, chassis type construction. WEIGHT: 42 lbs., 13 1/2 oz. net. FINISH: Chrome and black.

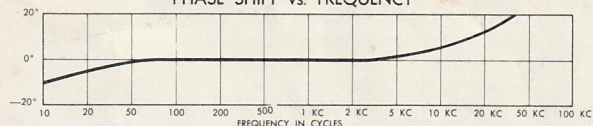
DISTORTION vs. POWER OUTPUT



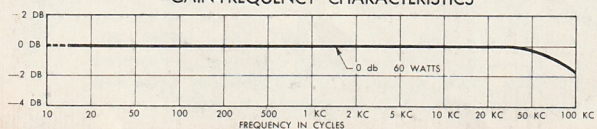
SINGLE FREQUENCY HARMONIC DISTORTION



PHASE SHIFT vs. FREQUENCY



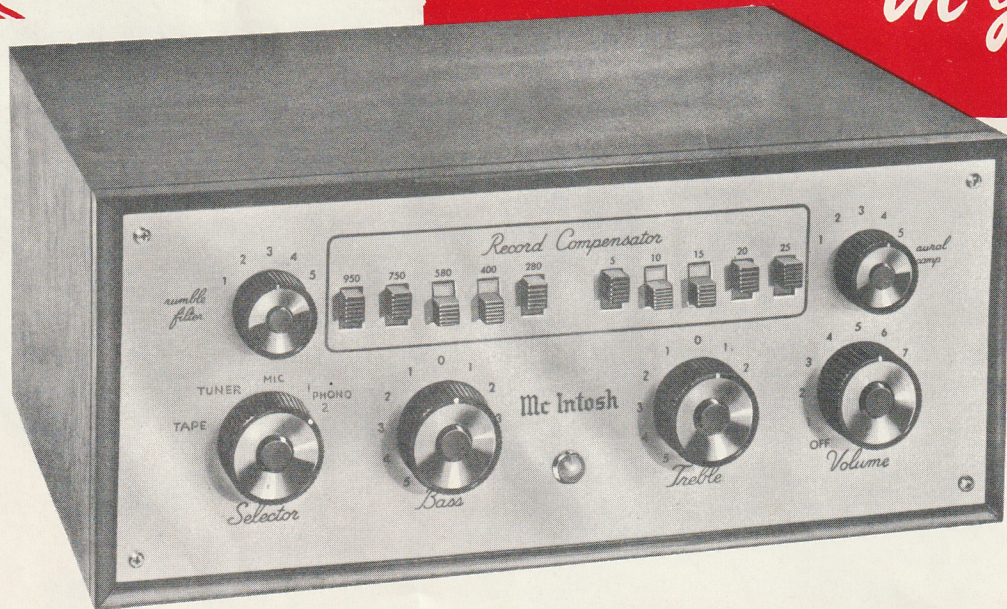
GAIN-FREQUENCY CHARACTERISTICS



Now

LABORATORY STANDARD PERFORMANCE

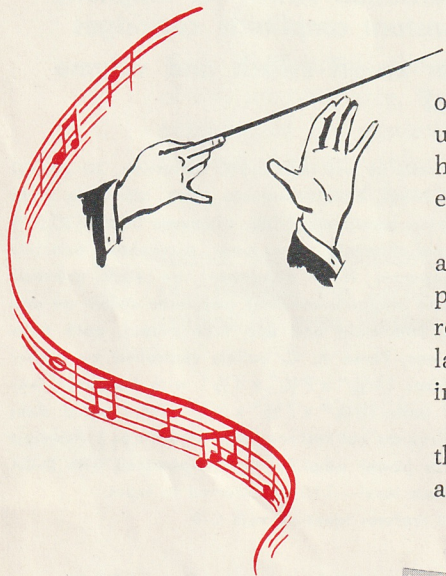
in your home!



Model Illustrated
McIntosh C-8M
with Mahogany cabinet
with Blonde cabinet C-8B
Without wooden cabinet
Order C-8

THE McIntosh Professional Audio Compensator

AND PRE-AMPLIFIER



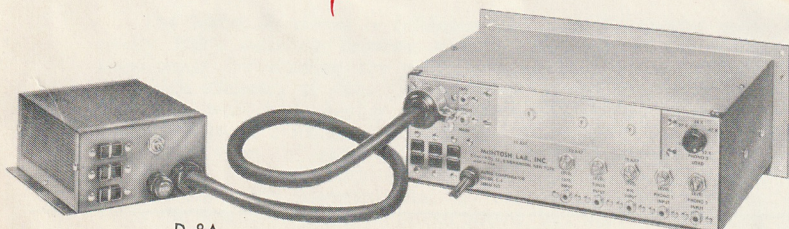
Play the masters as they themselves would play. The abundant flexibility of the beautiful new McIntosh C-8 assures you of the maximum listening pleasure from any sound source. It is a complete control center for professional and home entertainment systems, with the low distortion and stability you can always expect from a McIntosh.

Operation is surprisingly easy, yet it is the most flexible and advanced audio compensator available today. The control settings enable you to bring precision tonal balance to *any* program material—AM or FM radio, TV, tape or records, exactly as your keenest listening taste may dictate. The McIntosh record labeling system permits you to indicate accurately, right on your recordings for immediate reference, your personal preference of playback settings.

For your *complete* listening pleasure, you'll want the McIntosh C-8, the result of patient laboratory research, built with superb craftsmanship . . . an engineering masterpiece in the field of high fidelity sound.

FLEXIBILITY NEVER BEFORE ACHIEVED . . .

The back panel view illustrates the extreme versatility of the McIntosh C-8. For instance, three auxiliary 110 v. outlets are provided, so that record player, tuner, power amplifier, and compensator can all be controlled from the master on-off switch. There is one tape output, and one auxiliary output in addition to the regular amplifier output. A variable load resistor, calibrated from 6,800 ohms to 52,000 ohms, to terminate any magnetic cartridge, produces optimum performance for any prevailing condition. A switch provides equalization for amplitude cartridges, such as Phansteil, Weathers, or ceramic. There are five input channels, each with level controls, for proper connection with any possible signal source.



D-8A

Model Illustrated

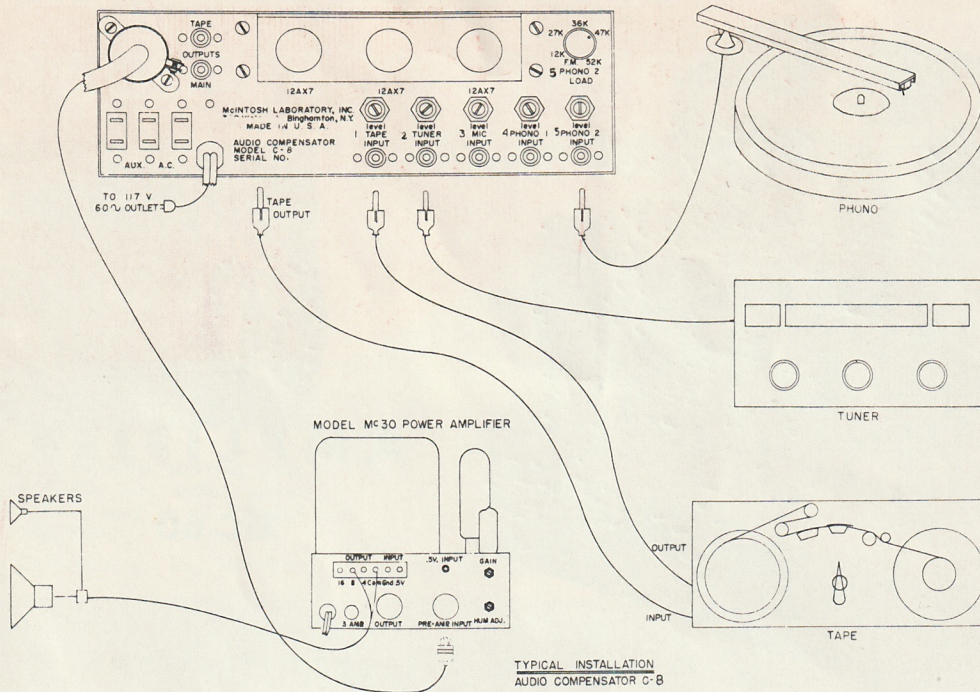
Self-powered McIntosh C-8P \$99.50

Self-powered unit

Mahogany cabinet C-8PM \$107.50

Blonde cabinet C-8PB 107.50

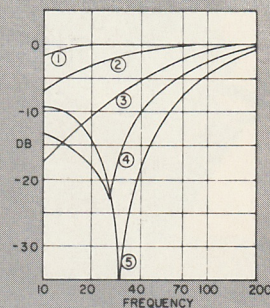
TYPICAL HOOK-UP OF C-8



TYPICAL INSTALLATION
AUDIO COMPENSATOR C-8

These curves can be selected in many combinations of Bass and Treble to compensate for any record.

RUMBLE FILTER

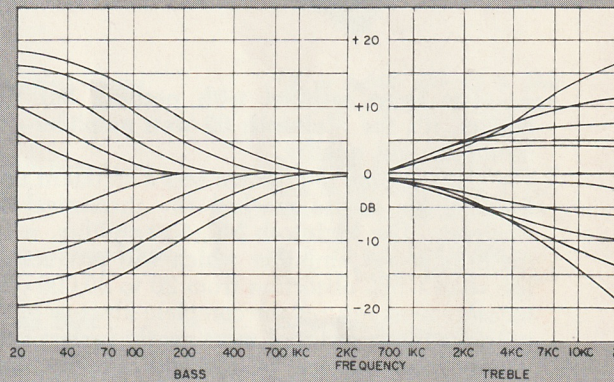


OUTSTANDING FEATURES OF THE C-8

- Five Bass (turnover) and five Treble Roll-off compensation switches, to obtain accurately any reverse recording curve or combination of curves, for the ultimate in playback results.
- Separate continuously-variable bass and treble controls for additional FINE compensation. Five accentuate and five attenuate positions are indicated.
- Aural compensator with five positions to reduce volume level, yet maintain proper balance between treble and bass. (Doubles as a loudness volume control.)
- Rumble filter to minimize very low frequency noise from turntables or acoustic coupling effects from loudspeaker to turntable.
- Selector for five program sources, from tape, TV, tuner, microphone, or any type cartridge.

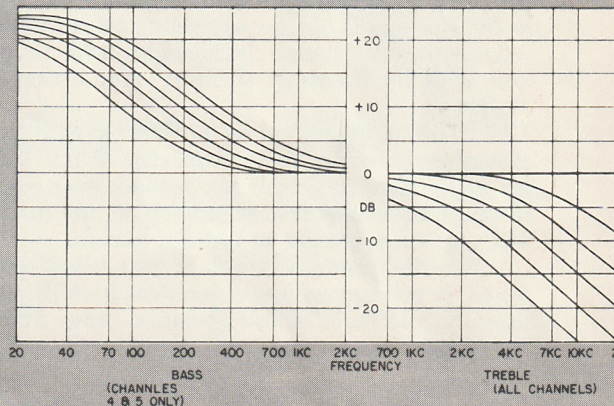
Delivers 4 volts at less than 0.3% distortion, 20-20,000 cycles, at any settings. Bass accentuate 18db, attenuate 20db (20 cycles); Treble accentuate 17db, attenuate 20db (20,000 cycles). Five input channels: tape, tuner, microphone and two phonograph. Separate level adjustment on each channel. Variable load and magnetic-constant amplitude switch on one phono channel. Two main and one tape output, each from a cathode follower. Three A. C. outlets controlled by master on-off switch. Size: 11 1/4" x 7 3/4" x 4 7/8" with hardwood enclosure. Control unit: 10 1/8" x 7 1/2" x 3 9/16". Front panel size: 11" x 4 1/4". (Sizes do not include cable clearances.) Powered by any McIntosh power amplifier or self-powered with D-8 power supply. Hum level—110 db referred to input.

VARIABLE BASS AND TREBLE

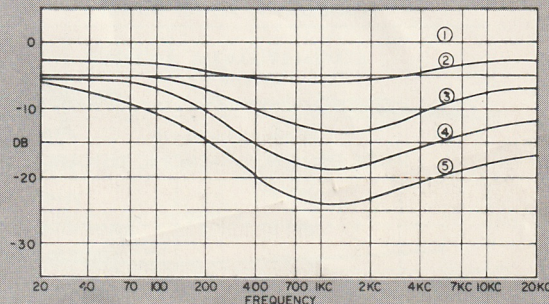


BASS COMPENSATOR

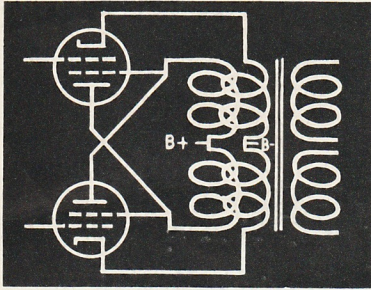
TREBLE COMPENSATOR



AURAL COMPENSATOR

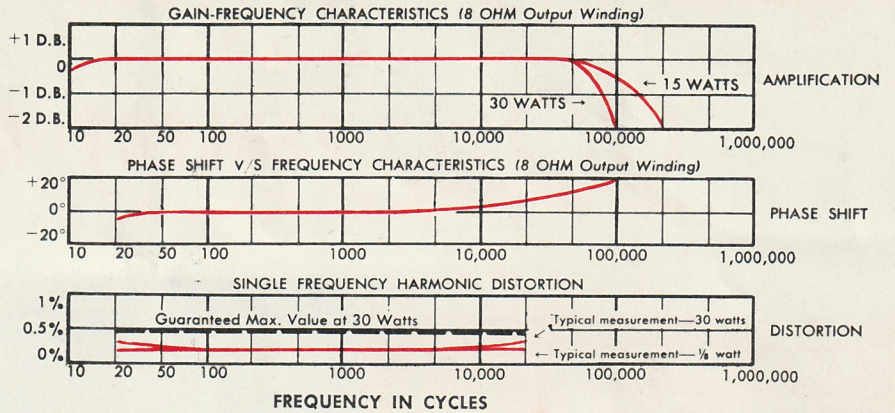


The McIntosh Patented* Circuit, with Unity Coupling guarantees this OUTSTANDING PERFORMANCE



The famous McIntosh patented Unity Coupled circuit with bifilar output transformer as used in all McIntosh power amplifiers.

*McIntosh Laboratory, Inc., introduced Unity Coupling to High Fidelity in U. S. Patents 2,477,074 (1949); also 2,545,788; 2,646,467; 2,654,058



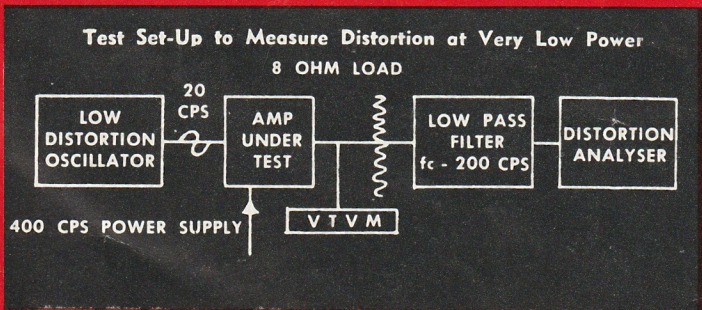
Compare these Specifications

MODEL: MC-30 AUDIO AMPLIFIER

Power Supply	117/125 volts, 50/60 cycles
Power Consumption	155 watts at 30 watts output 105 watts at zero signal output
Power Output	30 watts continuous
Input Level	Input #1 (pin jack and screw terminals) .5 volts to 30 volts, with gain control Input #2 2.5 volts (for use with McIntosh C-8 Pre-Amp).
Frequency Range	20 to 30,000 cycles \pm .1 db at 30 watts output 15 to 50,000 cycles \pm .5 db at 30 watts output 10 to 100,000 cycles \pm 1 db at 15 watts output
Harmonic Distortion	Less than 0.5% at 30 watts output or less, 20 to 20,000 cycles
Intermodulation Distortion	Less than 0.5% if instantaneous peak power is below 60 watts for any combination of frequencies 20 to 20,000 cycles
Impulse Distortion	Negligible
Noise and Hum Level	90 db or more below rated output

Damping Factor	12 or better for 4, 8 and 16 ohm output, 16 for 600 ohms
Input Impedance	0.5 meg for 0.5 volt input and 0.13 meg for 2.5 volt input. 20 cycles to 40,000
Output Impedance	4, 8, 16 and 600 ohms (600 ohm is balanced to ground)
Phase Shift	20 cycles 3° 20,000 cycles 9°
Tube Complement	Rectifier: 5U4-GA Pre-Amp: 12AX7 Phase Inverter: 12AU7 Voltage Amp: 12BH7 Driver: 12AX7 Output: 2-1614
Auxiliary Equipment Connection	Designed to power McIntosh Preamplifiers
Size	13 1/8" x 8" x 8" high, chassis type construction
Weight	30.5 pounds net
Finish	Chrome and Black

LOW DISTORTION MEASUREMENTS, guaranteed by thorough laboratory tests on each unit shipped.



TYPICAL MEASUREMENTS

Power Output	Harmonic Distortion
30 watts	.22%
15 watts	.12%
1.5 watts	.11%
157 milliwatts	.11%
15 milliwatts	.11%
1.5 milliwatts	.25% (Noise Level)