

**INSTRUCTION MANUAL**

**McINTOSH MODEL MC-30**

**30 WATT POWER AMPLIFIER**

Type A-116B

Serial #15329 and Over

**McINTOSH LABORATORY, INC**  
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U.S.A.

## ELECTRICAL AND MECHANICAL SPECIFICATIONS

### Specifications for the McIntosh Model MC-30 Audio Amplifier

Power Supply	117/125 volts, 50/60 cycles
Power Consumption	135 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 and pin 5 of pre-amp socket) .5 volts to 30 volts, with gain control Input #2 (pin 2 of pre-amp socket) 2.5 volts, (For use with McIntosh pre-amplifier equipment).
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 1/3% at 30 watts output or less, 20 to 20,000 cycles
Intermodulation Distortion	Less than 1/2% 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 Kc
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	Pre-Amp: 12AX7 Phase Inverter: 12AU7 Voltage Amp: 12BH7 Driver: 12AX7 Output: 2—1614 Rectifier: 5U4-GA
Auxiliary Equipment connection ("Pre-Amp input" receptacle)	Designed to power C-8 and other McIntosh Pre-Amplifiers
Size	13" x 8" x 8" high, chassis type construction
Weight	30.5 pounds net
Finish	Chrome and Black

## DESCRIPTION

The McIntosh Model MC-30 is a 30 watt high fidelity power amplifier designed for home entertainment systems and professional applications. The Model MC-30 is similar to the earlier McIntosh Model A-116 30 watt amplifiers and includes all of the rigid electrical specifications and features found in these earlier units plus: less than 1/3% harmonic distortion at any power output up to 30 watts and at any frequency in the audio spectrum, 20 to 20,000 cps; less than 1/2% intermodulation distortion if instantaneous peak power is below 60 watts for any combination of frequencies 20 to 20,000 cps; and noise and hum level 90 db or more below rated output. The famous McIntosh high efficiency output circuit is used to obtain the high standard of performance found in this amplifier.

The MC-30 may be operated from any signal source delivering 0.5 or more volts, or directly from a McIntosh Audio Compensator or Pre-Amplifier, such as the Models C-8, C-4, C-104, or C-108. Output impedances of 4, 8 and 16 ohms are provided for direct connection to loudspeakers. An additional 600 ohm output is present for use with lines, etc.

## INSTALLATION

### Location

The MC-30 should be located in a ventilated area. If the amplifier is housed in a cabinet or other enclosure, holes should be provided for air circulation.

### Input Connections

1. When a McIntosh Audio Compensator or other McIntosh pre-amplifier is used with the MC-30, plug the pre-amplifier's output-power cord into the "Pre-Amp input" receptacle on the MC-30 and turn the "gain" control fully counter clockwise. This receptacle supplies the required plate and filament power to the pre-amplifier equipment as well as providing the necessary audio connection.

For pre-amplifier installation and operation refer to the pre-amplifier's instruction manual.

2. When a signal source of 0.5 volts or more is used to drive the amplifier, such as the output from a tuner, tape recorder, or pre-amplifier, plug the source into the "0.5 volt input" pin jack receptacle or connect to the "0.5 volt" and "GND" screw terminals. Use the "gain" control to obtain the desired operating level.

If desired, the signal source may be wired to an octal plug for insertion in the octal "Pre-Amp input" receptacle. In this case connect the input lead to pin #5 and the ground lead to pin #1. When using this connection the source must not have a DC output component.

### Output Connections

The MC-30 has output impedances of 4, 8 and 16 ohms available at either the screw terminal connector or the output socket. In addition, a 600 ohm output (balanced to ground) is available at the output socket. See schematic diagram for socket connections.

It is important that the loudspeaker or other load be properly matched to the amplifier if best performance is to be obtained. Because many loudspeakers do not have voice coil impedances exactly matching 4, 8 and 16 ohms, the following table lists suggested connections for best impedance matching.

Speaker Impedance	3.2 to 6.5 ohms	6.5 to 13 ohms	13 to 32 ohms
Connect To	4 ohms	8 ohms	16 ohms

**WARNING:** Output plugs wired for McIntosh 20W-2 and 50W-2 amplifiers must not be used with the MC-30 without rewiring the plug.

### Power Connections

The MC-30 operates from any 110 to 130 volt 50-60 cycles power line. (When continuous use is contemplated on 120 to 130 line volts the transformer primary should be re-connected using the 125 volt tap.)

When the MC-30 is used with the McIntosh Pre-Amplifier equipment, tuners, or other associated equipment the MC-30 power cord is plugged into the receptacle at the rear of these units. When thus connected the power switch of these units controls the MC-30.

U. S. Patents No. 2,477,074; 2,545,788; 2,646,467; 2,654,058 others pending

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