INSTRUCTION MANUAL

McINTOSH MODEL MC-30

30 WATT POWER AMPLIFIER

Type A-116B

Serial #9E341 and above

038-243

MCINTOSH LABORATORY, INC

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 maybe 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. Additional outputs for 166 ohms (70.7 volts) and 600 ohms are provided for use with multiple speaker systems, 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.

GUARANTEE

We guarantee the performance of this equipment and the mechanical and electrical workmanshipto be free of defects for a period of 90 days. This guarantee does not extend to components iamaged by improper use nor does it extend to transportation to and from the factory.

SERVICE INFORMATION

All McIntosh equipment is designed far long trouble free operation. All components are of highest quality and are conservatively operated. If trouble develops the amplifier may be serviced by your franchised dealer, a competent serviceman, or returned to the factory. Equipment will not be accepted at the factory unless factory return authorization is first received. The following chart of operating voltages and resistances is offered as a guide for servicing the unit. All voltages and resistences are measured to chassis except those with asterisk (*). These are measured to chassis with pin #2 of the 5U4GB grounded. Voltages are measured with high impedence VTVM. NOTE--UNIT MUST BE TURNED OFF WHEN MEASURING RESISTENCES.

VOLTAGE AND RESISTANCE CHART

Tube	Pin No.	DC Volts No Signal	DC Volts at 30W out	AC Volts at 30W out	Resistance Unit off
12AX7					
(Input)	1	134	120	1. 3	330K*
	2	0	0	0. 24	1M
	3	1.2	1. 1	0. 22	3.3K
	4&5	Fil	6. 3 V. ac to Pin 9	-	0 to 70
	6, 7, 8	-	-	-	-
	9	Fil	-	-	0 to 70
12AU7	1	270	235	9	40*
	2	134	120	13	330K*
	3&8	138	126	0. 57	13K
	4&5	Fil	6. 3 V. ac to Pin 9	-	0 to 70
	6	270	235	9	43K*
	7	110	100	0	26M*
	9	Fil	•	-	0 to 70
12BH7	1	355	295	132	12K*
	2	0	0	9	220K
	3&8	16	14	0. 32	1.2K
	4&5	Fil	6. 3 V. ac to Pin 9		0 to 70
	6	355	295	132	12K*
	7	0	0	9	220K
	9	Fil	-	-	0 to 70

ELECTRICAL AND MECHANICAL SPECIFICATIONS

Specifications for the McIntosh Model MC-30 Audio Amplifier

Power Supply	117/125 volta, 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 ± .1 db at 30 watts output 15 to 50,000 cycles ± .5 db at 30 watts output 10 to 100.000 cycles ± 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. 166 (70. 7 volts) 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: 12 BH7 Driver: 12AX7 Output: 2--6L6GC/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 pound, net
Finish	Chrome and Black