McIntosh Amplifiers

- Highest quality yet attained.
- Highest efficiency yet achieved.
- Full dynamic range.
- Smallest size and weight for power output.
- Widest frequency range.
- Lowest phase shift distortion.
- Lowest noise level.
- Lowest cost considering performance.
- Negligible impulse distortion.
- Simplified servicing due to mechanical design.

"Ask the man who has heard one"

The McIntosh Circuit for amplifier design, for which patents are pending, gives inherent advantage over conventional circuits of over 16 to 1 and permits the phenomenal performance characteristics, described in detail on the following pages, to be fully met with a margin to spare.

Three years of concentrated laboratory work went into the development of an audio amplifier of almost distortionless output, both single frequency, and intermodulation products which delivers a continuous full power for the 50W-1 amplifier of 50 watts and an instantaneous peak power of over 100 watts from two 6L6G tubes at substantially less than 1% distortion over the entire frequency range of 20 to 20,000 cycles without overloading the tubes. The 15W-1 gives similar performance for 15 watts. The McIntosh Circuit and transformers make this possible. The useful bandwidth of these amplifiers, 10 to 200 kilocycles, may seem exceptionally high but it is necessary to have this wide bandwidth in order to keep the harmonic and phase distortion at the low value achieved and desired.

Impulse distortion in amplifiers generally is very serious but in this amplifier it has been practically eliminated by careful design. This type of distortion is one of the basic reasons why amplifiers that measure well do not necessarily sound good when coupled to loud speaker systems.

- There are two amplifiers now available combining the McIntosh Circuits with novel, more practical construction designed to minimize production cost and facilitate maintenance.

- The units can be mounted either on a 7½ x 19½ standard relay rack or the identical units can be arranged with an assembly kit for portable use, making a single unit, or can be mounted on the wall or on a shelf as may be required.

- There will shortly be available a control console to permit multiple microphone-phonograph inputs and remote operation of the gain controls as may be required to satisfy a wide variety of special installation requirements.

McIntosh Laboratory

General Office
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**50W-1 AMPLIFIER**

**GENERAL SPECIFICATIONS**
- **TUBES**: Output: 2—6L6G or 1614
- **Driver**: 2—6JS
- **Rectifier**: 2—5L4G
- **Inverter Amplifier**: 1—12AX7
- **Preamp Amplifier**: 1—12AX7 (as required)
- **Amplifier and Power Supply Units**: Each 8 3/16" x 6 3/16" x 4 3/4" high (tubes extend 4 1/2" above units).
- **Mounting**: One amplifier and one power supply unit will mount on a standard rack panel 7" x 19".
- **Weight**: Power supply and amplifier units each 25 pounds, approximately.
- **Finish**: Aluminum gray Hammertone. (Panel finish—black or grey crackle, or to customer’s specifications.)

**ELECTRICAL SPECIFICATIONS**
- **Efficiency**: 60% at 50 watts, 67% at 60 watts

**COMMON TO BOTH AMPLIFIERS**
- **Gain**: 40 db minimum; 100 db maximum (with 1 preamp and input transformers).
- **Input Impedance**: Unit alone input normally 200,000 ohms without input transformer. Universal input transformer 30 to 250 ohms, 600 ohms and bridging input with series resistors.
- **Output Impedance**: 0 ohms balanced; 4, 8, 16, or 32 ohms, balanced or unbalanced.
- **Noise and Inverter Amplifier Input**: 90 db below rated output. 80 db below rated output with preamp input. Use of input transformer does not change these ratios.
- **Sizing and Plug-in Features**
  3. One Inverter Amplifier Type API-3.
  4. Preamp Amplifier Type ACF-1 (extra as required).
  5. Input and Output Plugs Type GP-1A.
  6. Volume Control and Plug Assembly Type VCI-2.
  7. 23-second thermal plate delay relay.
  8. Standard 7" x 19" relay rack panel and cover plate. Type #533, including fuse holder, on and off switch, indicator lamp, and volume control.
  9. For portable use #654 cover is available for the 50 W-1 amplifier and #754 cover for the 15 W-1 amplifier.
  10. Items 8 & 9 are available in Black Crinkle, Gray Crinkle, Gray Hammertone or RCA Gray.

**15W-1 AMPLIFIER**

**GENERAL SPECIFICATIONS**
- **TUBES**: Output: 2—6V6-G
- **Driver**: 2—6JS
- **Rectifier**: 1—5Z4
- **Inverter Amplifier**: 1—12AX7
- **Preamp Amplifier**: 1—12AX7 (as required)

**COMMON TO BOTH AMPLIFIERS**
- **Gain**: 40 db minimum; 100 db maximum (with 1 preamp and input transformers).
- **Input Impedance**: Unit alone input normally 200,000 ohms without input transformer. Universal input transformer 30 to 250 ohms, 600 ohms and bridging input with series resistors.
- **Output Impedance**: 0 ohms balanced; 4, 8, 16, or 32 ohms, balanced or unbalanced.
- **Noise and Inverter Amplifier Input**: 90 db below rated output. 80 db below rated output with preamp input. Use of input transformer does not change these ratios.
- **Sizing and Plug-in Features**
  3. One Inverter Amplifier Type API-3.
  4. Preamp Amplifier Type ACF-1 (extra as required).
  5. Input and Output Plugs Type GP-1A.
  6. Volume Control and Plug Assembly Type VCI-2.
  7. 23-second thermal plate delay relay.
  8. Standard 7" x 19" relay rack panel and cover plate, Type #533, including fuse holder, on and off switch, indicator lamp, and volume control.
  9. For portable use #654 cover is available for the 50 W-1 amplifier and #754 cover for the 15 W-1 amplifier.
  10. Items 8 & 9 are available in Black Crinkle, Gray Crinkle, Gray Hammertone or RCA Gray.

**ELECTRICAL SPECIFICATIONS**
- **Efficiency**: 50% at 15 watts

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