

The Greatest FLEXIBILITY  
 The Finest PERFORMANCE  
 The Highest QUALITY  
 The McIntosh C20

The C20 is the only Stereo Control Console that has enough flexibility to control all program sources.

The C20 is the only Stereo Preamp with enough record compensation for the valuable Monophonic as well as the new Stereo records.

The C20 has the most complete facilities for tape recording, playback, dubbing and monitoring.

The C20 has by far the simplest yet complete control of tone balance.

The C20 is by far the easiest to mount and still give professional appearance.

The C20 is produced from three years of careful thorough research and development.



STEREO PRE AMPLIFIER

## ELECTRICAL SPECIFICATIONS

**Frequency Response:**  $\pm 0.5$  db 20 to 20,000 cycles

**Distortion:** Less than 0.2% at rated output, 20 to 20,000 cycles

**Hum and Noise:** High level inputs: 85 db below rated output  
Low level inputs: less than 2 microvolts at input terminals

### Input Sensitivity and Input Impedance:

Auxiliary;

0.25 volts 470,000 ohms

Tape:

0.25 volts 470,000 ohms

Tuner 1:

0.25 volts 470,000 ohms

Tuner 2:

0.25 volts 470,000 ohms

Phono 1:

2 to 10 millivolts 47,000 ohms for low output cartridge

10 to 70 millivolts 47,000 ohms for hi output cartridge

0.1 volt 220 mmf in series with 47,000 ohms for Xtal or Ceramic

Phono 2:

Same as phono 1

Tape Head 1:

2 to 10 millivolts 47,000 ohms for low output head

Tape Head 2;

Same as tape head 1

Tape Compare (Monitor):

0.25 volts, 115,000 ohms

**Main Output:** 2.5V with rated input  
2 output jacks in parallel for each channel

**Tape Output:** 0.25V with rated input  
1 output jack for each channel

Left plus right output: 2.5 volts from source  
impedance of 23,000 ohms

### Voltage Amplification:

Low level inputs to Main Output:  
1,000 to 1 (60db) at 1000 cycles

Low level inputs to Tape Output:  
100 to 1 (40db) at 1000 cycles

High level inputs to Main Output:  
10 to 1 (20db)

High level inputs to Tape Output:  
1 to 1 (0db)

Tape Monitor input to Main Output:  
10 to 1 (20db)

**A.C. Aux. Outlets:** 1 unswitched for tape machine or turntable. colored Red; 4 switched, colored Black

**Power Requirements:** 117 volts 60 cycles  
A.C. 35 watts

## MECHANICAL SPECIFICATIONS

**Size:**  $15\frac{5}{8}$ " wide by  $5\frac{1}{8}$ " high. Overall depth of chassis behind front panel is  $12\frac{13}{16}$ ". The space required in front of cabinet panel for the thickness of the panel and knobs is  $1\frac{1}{4}$ ".

**Weight:** Chassis only 18 pounds. In shipping carton  $28\frac{1}{2}$  pounds.

## CONTROLS

**Input Selector:** Selects any one eight program sources including Tape, Tuner 1 and Tuner 2, Auxiliary, Phono 1 and Phono 2, Tape Head 1 and Tape Head 2. Each phono input has two switch positions, one for stereo the other parallels the stereo cartridge for Monophonic records.

### Mode Selector:

Reverse: connects left channel to right speaker, right channel to left speaker, corrects for left-right reversal of program.

Stereo: (normal Stereo mode selector position) left channel to left speaker, right channel to right speaker.

Left: left channel to left speaker no program to right speaker.

Right: right channel to right speaker, no program to left speaker.

M Left: left channel only to both speakers.

M Right: right channel only to both speakers.

**Record Compensator:** Separate bass and treble compensator switches including "RIAA," "LP," "Tape-Head," flat position for microphone and other positions for monophonic records. (Turning "TREBLE" control to "TAPE" gives flat response. Turning "BASS" to "O" gives flat response.)

### Tone Controls:

Treble: boost 13 db at 20,000 cycles attenuate 18 db at 20,000 cycles.

Bass: boost 16 db at 20 cycles, attenuate 20 db at 20 cycles.

**Balance Control:** To balance for unequal program source: Turning control to left reduces right channel to No Output Turning control to right reduces left channel to No Output.

**Phase Control:** Reverses phase in the left channel to correct for speaker or program phasing.

**HF Cutoff Filter:** Three positions providing (1) no filter action for normal use, (2) 9 KC cutoff, and (3) 6 KC cutoff to suppress record noise and hiss.

**Loudness Control:** Compensates for the Fletcher-Munson hearing characteristics as program loudness is reduced.

**Rumble Filter:** Suppress low frequency disturbances such as rumble.

**Tape:** Front panel jacks, push button switch controlled to permit the addition of a portable tape recorder without disrupting the equipment permanently installed.

**Tape Monitor:** To permit instantaneous monitoring of tape before and after recording.

**Low Frequency Trim Controls:** On the back panel. Compensate for unequal response at low frequencies due to position of speakers or differences in speaker efficiency. Provides 6 db boost at 50 cycles starting from 500 cycles or 8 db cut at 20 cycles starting from 200 cycles.

# McIntosh

LABORATORY, INC.

2 CHAMBERS STREET, BINGHAMTON. N. Y.

Phone-Area Code 607-723-5491

In Canada: Manufactured under license by:

McCurdy Radio Industries, Ltd., 22 Front Street West, Toronto, Canada