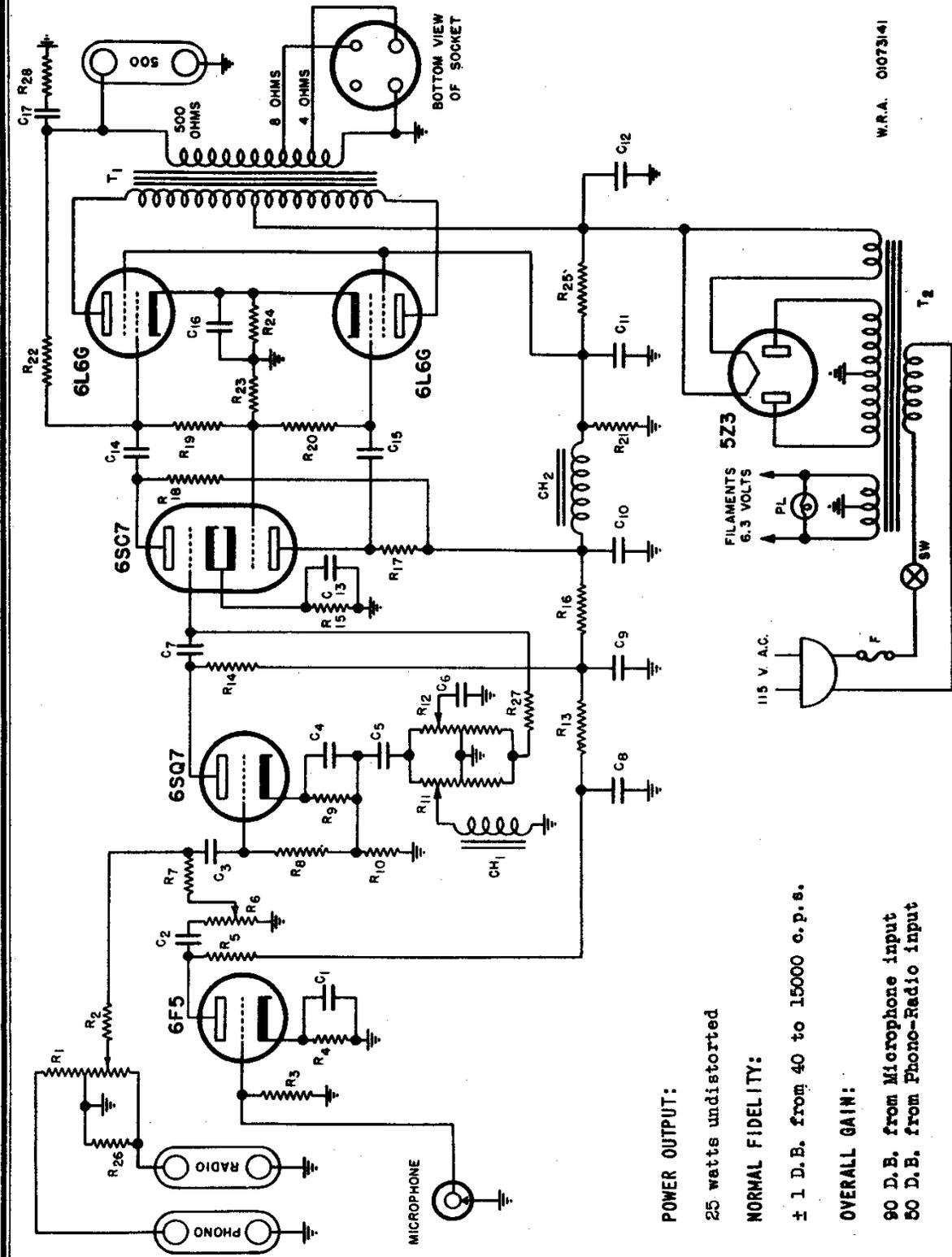


THE HALLICRAFTERS CO.

MODEL 8-51-A



W.R.A. 01073141

- POWER OUTPUT:**
25 watts undistorted
- NORMAL FIDELITY:**
± 1 D.B. from 40 to 15000 c. p. s.
- OVERALL GAIN:**
90 D.B. from Microphone input
50 D.B. from Phono-Radio input

MODEL S-31-A

THE HALLICRAFTERS CO.

POWER CONSUMPTION:

100 watts

POWER SOURCE:

115 volts 60 cycle A.C.

PANEL DIMENSIONS:

19" x 8-3/4"

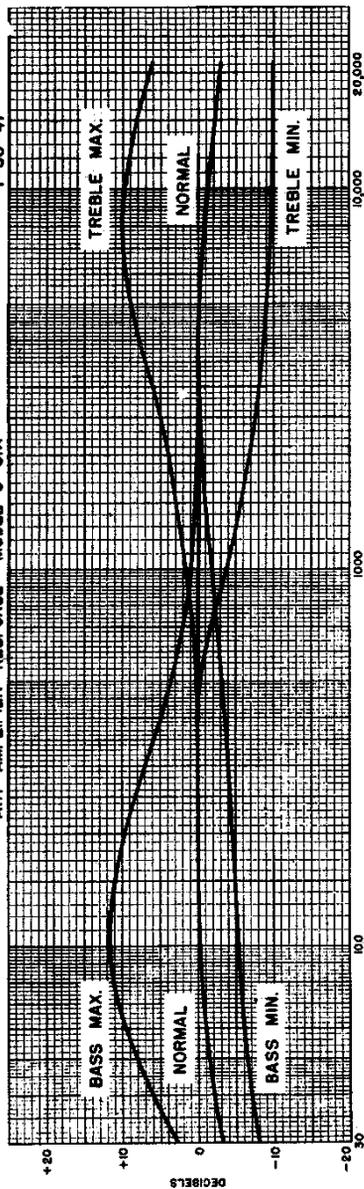
CHASSIS DIMENSIONS:

16-3/4" long - 9 1/2" wide

OUTPUT:

500 ohms
8 ohms and 4 ohms

A.F. AMPLIFIER RESPONSE - MODEL S-31A



IMPORTANT: This amplifier, unless otherwise obtaining external field supplies. The S-31A was not designed to supply field excitation.

Additional speakers may either be connected in series or in parallel, depending upon their impedances - parallel connection being preferred when possible. Since the available output impedances are 4, 8, and 500 ohms, it will be necessary to find a combination matching these values as close as possible. Ohm's law follows in that 2-8 ohm speakers in parallel gives 4 ohms, 2-4 ohm speakers in series gives 8 ohms, 4-8 ohm speakers in series gives 8 ohms, etc.

RADIO: Although the S31A was designated as a companion unit to our MODEL S-31 Tuner for Frequency Modulated and Amplitude Modulated Broadcast Reception, any suitable tuner having an output impedance of 500 ohms may be connected to the RADIO input strip. The upper terminal is grounded.

PHONO: Any high impedance phonograph pickup may be used in conjunction with the S31A by connecting to it the PHONO strip. Again, the top terminal is grounded.

MICROPHONE: The microphone circuit is designed for high impedance microphones such as the crystal and dynamic types. The microphone receptacle is located on the rear apron of the chassis.

SPEAKER: The full high fidelity capabilities of the S31A amplifier will not be realized unless a speaker system is used which is capable of reproducing the full range of the amplifier. The frequency range offered by high fidelity FM extends from 40 to 15,000 cycles per second.

GROUND CONNECTION: To reduce the possibility of hum and noise pickup in the high gain input stage from extraneous sources the S31A chassis should be connected to a good ground.

- R1 - 500,000- 500,000 vol. control
- R2 - 425-084
- R3 - 500,000 1/2 watt
- R4 - 1 meg.
- R5 - 3000 ohm "
- R6 - 250,000 "
- R7 - 500,000 vol. control #25-083
- R8 - 500,000 1/2 watt
- R9 - 1.0 meg.
- R10 - 2000 ohm "
- R11 - 10,000 ohm "
- R12 - 500,000- 500,000 Bass Control
- R13 - #25-082
- R14 - 500,000- 500,000 Treble Control
- R15 - 500,000 ohm 1 watt
- R16 - 100,000 ohm 1/2 watt
- R17 - 1000 ohm "
- R18 - 50,000 ohm "
- R19 - 100,000 ohm "
- R20 - 100,000 ohm "
- R21 - 30,000 ohm "
- R22 - 250,000 ohm "
- R23 - 250,000 ohm "
- R24 - 250 ohm "
- R25 - 3500 ohm "
- R26 - 500 ohm "
- R27 - 15,000 ohm 1/2 watt
- R28 - 5000 ohm 1/2 watt
- C1 - 30 Mfd. - 25 volt Electrolytic
- C2 - 0.1 Mfd. 600 V. Paper
- C3 - 0.05 Mfd. - 200 V. Paper
- C4 - 30 Mfd. - 25 V. Electrolytic
- C5 - 1.0 Mfd. - 200 V. Paper
- C6 - 0.01 Mfd. - 600 V. Paper
- C7 - 0.1 Mfd. - 600 V. Paper
- C8-C9 - 8- 8 Mfd. - 475 V. Electrolytic
- C10-C11 - 8- 8 Mfd. - 475 V. Electrolytic
- C12 - 8- 8 Mfd. - 475 V. Electrolytic
- C13 - 30 Mfd. - 25 V. Electrolytic
- C14 - 0.1 Mfd. - 600 V. Paper
- C15 - 0.1 Mfd. - 600 V. Paper
- C16 - 0.01 Mfd. - 600 V. Paper
- C17 - 0.01 Mfd. - 600 V. Paper
- T1 - Output transformer A5349
- T2 - Power " P5229
- CH1 - Bass Choke #55-010
- CH2 - Filter Choke C1003
- FL - 6.3 V. - 0.15 amp. pilot lite
- F - 2 amp. fuse