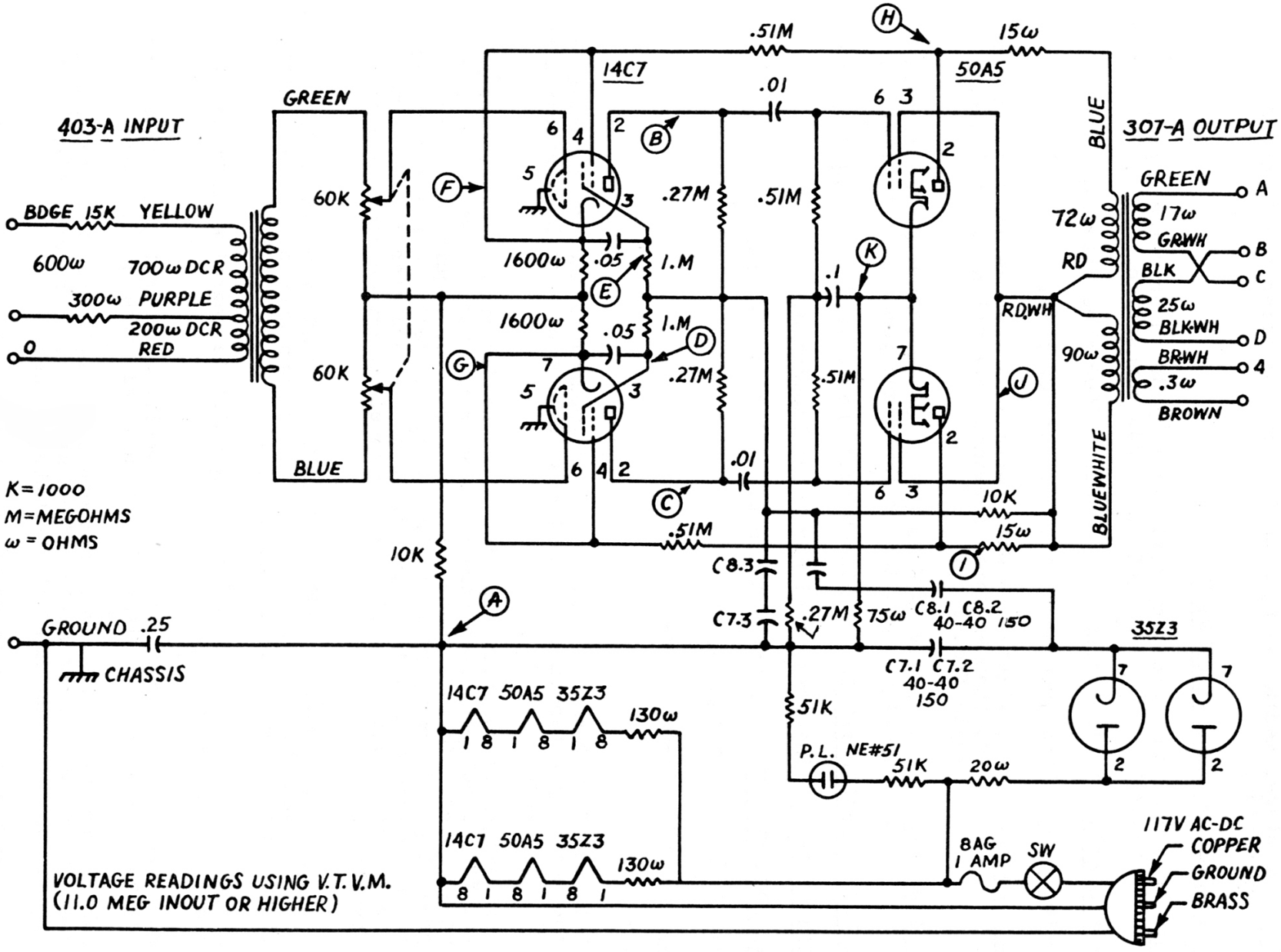

LANGEVIN MFG. CORP.

MODEL S-514-A

MODEL S-514-A LANGEVIN MFG. CORP.

TYPE: Two stage, medium gain, 4 Watt power amplifier for AC or DC operation.

TYPICAL ELECTRICAL CHARACTERISTICS:

Gain: From 600 ohm source, approximately 43 db on bridging input. Approximately 61 db on 600 ohm input connection.

Operates From: Nominal source impedance of 600 ohms bridging.

Operates Into: Load impedance of 4, 125 or 500 ohms.

Output Power: Approximately 3 Watts with less than 2% or, 4 Watts with less than 5% total harmonic distortion at 400 Cycles single frequency.

Output Noise: 42 db below +35 VU (7 db below .001 Watt) or better, depending upon tube balance and power line conditions.

FREQUENCY CHARACTERISTICS: ± 4.0 db over the range 50 to 15,000 cycles.

VOLUME CONTROL: Operates on either input impedance.

POWER CONSUMPTION: 117 Volts AC or DC. 72 VA at 120 Volts.

FUSE: Type 3 AF 1 Ampere.

TUBES: 2-35Z3, 2-50A5, 2-14C7

NOTES:

1. C terminal on Terminal Strip (chassis ground) should be connected to the zero input terminal - conditions permitting - to help reduce line pickup noise.

2. The S-514-A is normally supplied with the "0" input, chassis ground, and "0" output terminals strapped together (externally) on the terminal board. In this condition, the amplifier requires no other grounding. However, if installation requirements demand a variation of the standard ground strapping, it may be necessary to experiment with other grounding conditions for lowest noise levels and good stability.

2. When operating from DC, OBSERVE POLARITY. BLACK wire in the power cord is connected to copper lug which in turn should plug to positive of DC line or, ungrounded side of AC line.

   WHITE wire is connected to brass lug which is negative on DC lines or, grounded side of AC lines.

   RED wire, which is connected to the amplifier chassis, may or may not be connected to ground depending upon local noise conditions.

3. Tube filaments are so wired that one 35Z3, 14C7 are in series and in case of failure in one series filament circuit, the amplifier will operate on the other half of the tube lineup.

4. On AC operation, some types of interference, due to electrical appliances, may be greatly reduced by the use of a 117 Volt AC line isolation transformer having an electrostatic shield. The Langevin Type 803-A Transformer, having a 75 Watt capacity, is suggested for this use.