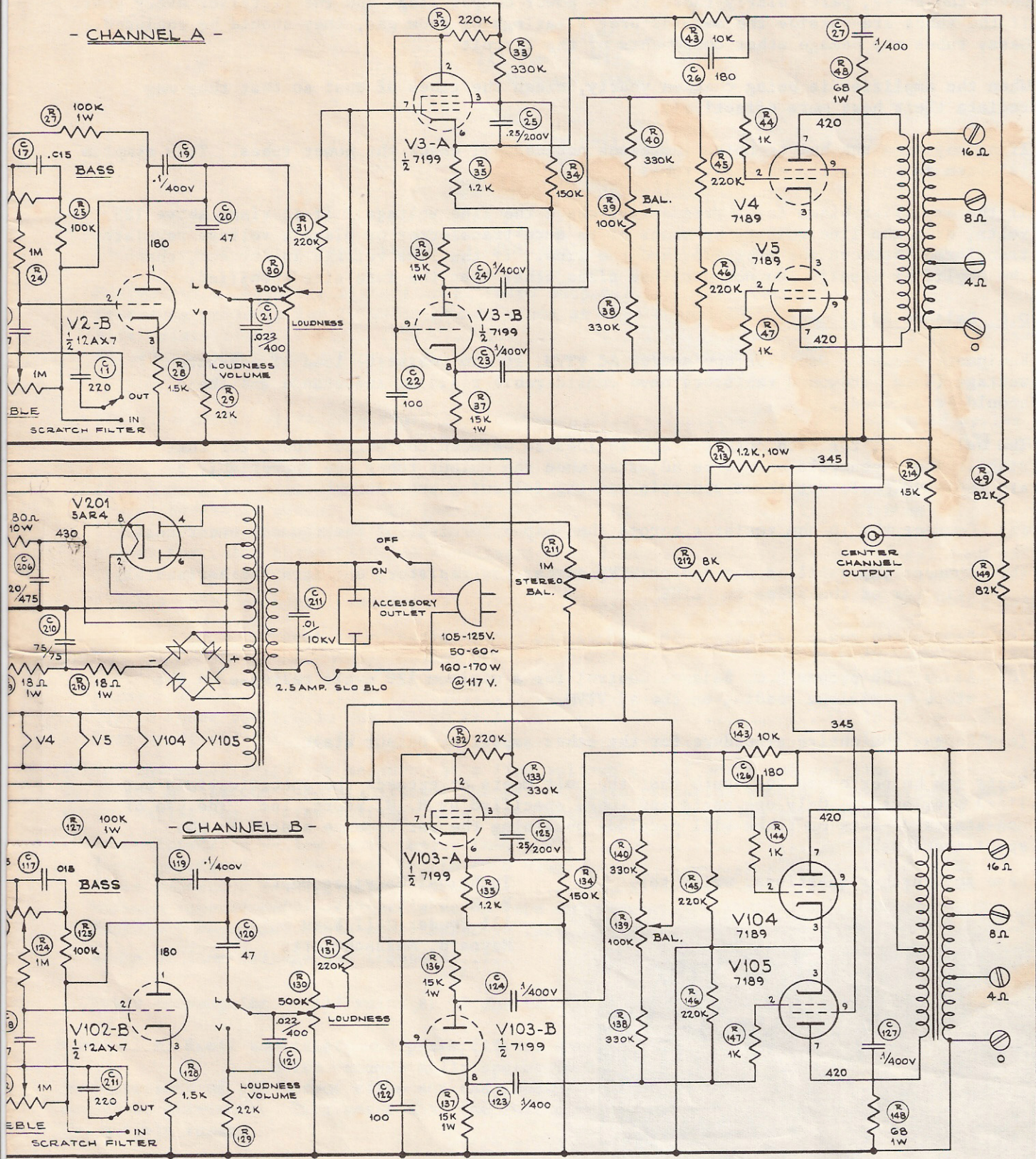
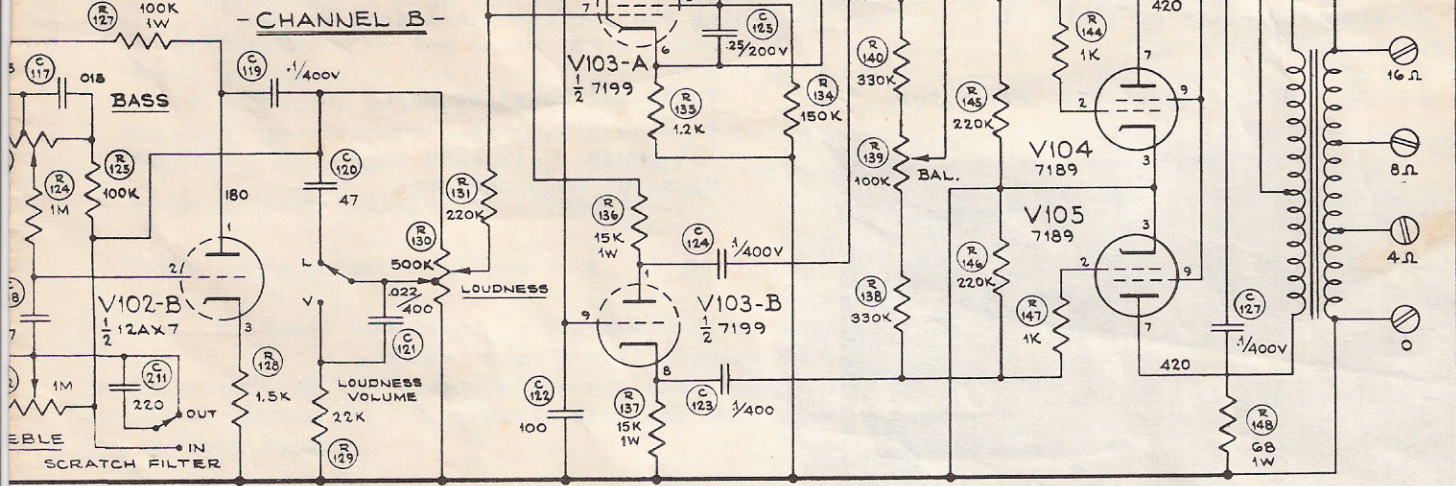


- CHANNEL A -



- CHANNEL B -



TYPE LK-48 STEREO AMPLIFIER KIT

CHANNEL A ARE MECHANICALLY
TROLS IN CHANNEL B

UNLESS OTHERWISE SPECIFIED
1. ALL VOLTAGES DC, ±15%
MEASURED WITH V.T.V. M.
2. NO INPUT SIGNAL AND
117 VOLT LINE.
3. SWITCHES SHOWN IN
MAXIMUM C.C.W. POSITION.

SCALE ~	19 JULY 1961.
LK-48 CIRCUIT DIAGRAM	
H. H. SCOTT, INC.	
MAYNARD, MASS., U. S. A.	
DR. CASSIDY	ENG. <i>[Signature]</i>
CH: <i>[Signature]</i>	PROD.
DWG. NO. D-LK-48-C1 sub 0	

SERVICE BULLETIN
 For
MODEL LK-48 STEREO AMPLIFIER

SPECIFICATIONS

Maximum power output each channel at 1000 cycles: Music waveforms...	24 watts
Steady state.....	20 watts
Maximum total harmonic distortion at rated output.....	0.8%
Frequency response for 20 watts steady state at less than 1.5% total distortion.....	20 to 20,000 cycles *
Maximum usable power output at 20 cycles: Music waveforms...	28 watts
Steady state.....	24 watts
Power bandwidth at rated distortion (IHFM method).....	below 19 cycles to * above 20,000 cycles (limits of test equip)
Intermodulation distortion.....	below 0.5%
Signal for rated output -- NAB (NARTB) tape at 1 kc.....	3.0 mv.
Signal for rated output -- RIAA equalization at 1 kc.....	3.0 mv. (MAG LOW)
Signal for rated output -- RIAA equalization at 1 kc.....	9.0 mv. (MAG HIGH)
Signal for rated output -- Tuner, Extra, and Playback.....	0.50 volts
Hum and noise -- high level inputs.....	80 db. below rated power
Hum and noise -- low level inputs.....	10 microvolts equiva- lent
Scratch filter.....	Above 5 kc.
Treble boost and Treble cut (at 10 kc.).....	15 db. \pm 2 db.
Bass boost and cut (at 50 cycles).....	15 db. \pm 2 db.

(These characteristics are measured at a line voltage of 117 volts rms and line frequency of 60 cycles per second. No significant changes of characteristics should be experienced for normal variations of line voltages or a line frequency of 50 cycles per second).

Input impedance -- low level inputs (MAG LOW).....	47 k. ohms
Input impedance -- low level inputs (MAG HIGH).....	150 k. ohms
Input impedance -- high level inputs.....	500 k. ohms
Minimum recommended load resistance on tape outputs.....	200 k. ohms
Maximum recommended cable capacitance on tape outputs.....	200 mmfds.
Range of line voltage and frequency.....	105-125 volts, 50-60 cycles
Power consumption -- 117 volts at 60 cps (A.C. only)	170 watts

* All H. H. Scott amplifiers and preamplifiers incorporate a low frequency rolloff which becomes fully operative below 20 cycles. This is designed to prevent overload of the output stage and the loudspeaker due to subsonic rumble frequencies and record eccentricity. This means that the full power of the amplifier can be concentrated into the audible range.

GENERAL SERVICE NOTES

1. Check the tubes, particularly those in the power output stage and the rectifier every year. If the tubes are outside the manufacturer's ratings or show gas, they should be replaced. Gassy tubes may damage other components of the circuit.
2. When the amplifier is being checked yearly, clean the tubes of dust so that they may radiate their heat more effectively.
3. If at any time the hum or noise increases noticeably, check the power tubes. This symptom is often an indication of gassy tubes.
4. If the amplifier blows fuses frequently, check the line voltage. If it rises above 125 volts, drop the line voltage by means of an auto-transformer or place a voltage regulator transformer between the amplifier and the line. If the line voltage is correct, check the amplifier itself. Do not use fuse sizes other than the fuse size specified.
5. D.C. Balance Adjustment:

Equipment Needed - Oscilloscope and/or AC VTVM, 16 ohm resistive load of adequate wattage (some wirewound resistors have considerable residual inductance and these should be avoided).

The balance pot for each output stage is located between the output tubes for that stage. These controls should be adjusted when the output tubes age appreciably or are replaced. To set these controls use the following procedure:

- (a) Connect the 16 ohm resistor across the output terminal of the channel under test.
 - (b) Connect the oscilloscope and/or VTVM across the resistor, and turn the horizontal selector of the scope to "LINE".
 - (c) Remove the phase inverter tube 7199 of the output stage under test.
 - (d) Adjust the proper D.C. Balance Control for a minimum 120 cycle response on the scope or minimum reading on the AC VTVM.
 - (e) Repeat the entire procedure for the other amplifier output stage.
6. Tests can be performed to insure that the unit meets or exceeds the specifications outlined previously. Only use parts and tubes specified by H. H. Scott, Inc. The use of non-standard parts or tubes will preclude obtaining the performance stated in the specifications.

If you have any further questions, write to:

Technical Services Dept.
H. H. Scott, Inc.
111 Powder Mill Road
Maynard, Massachusetts

