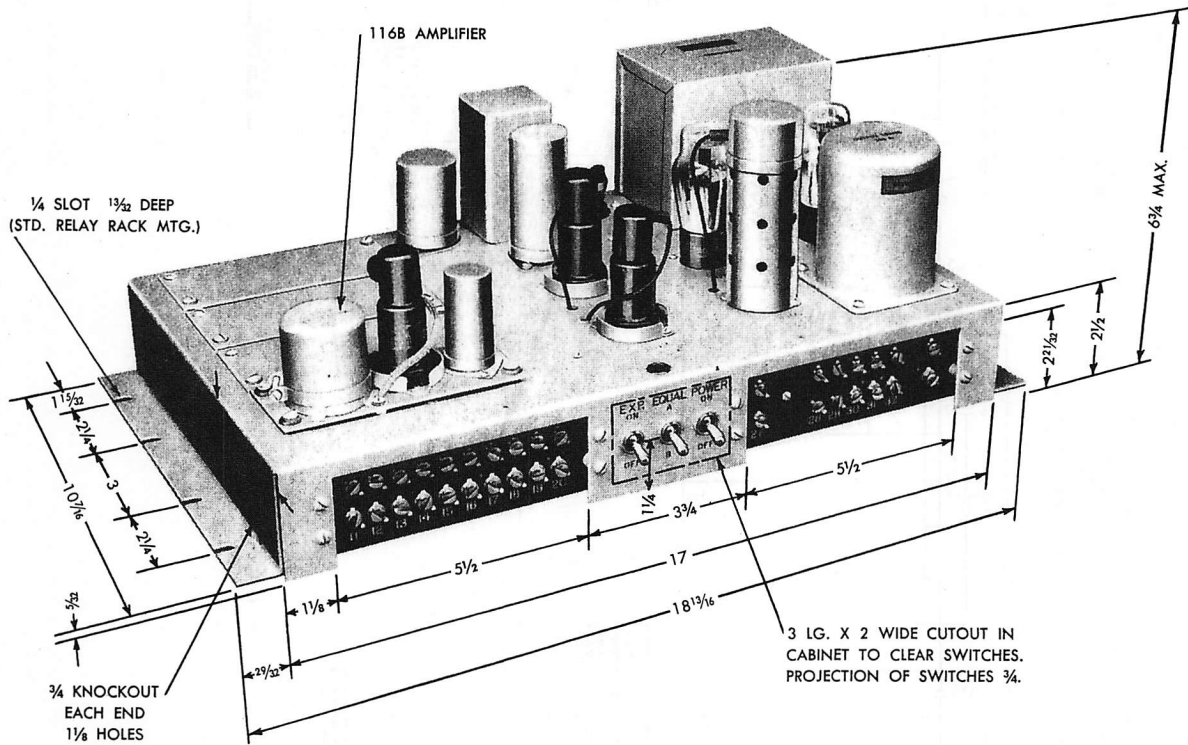


117A AMPLIFIER
INSTALLATION INFORMATION



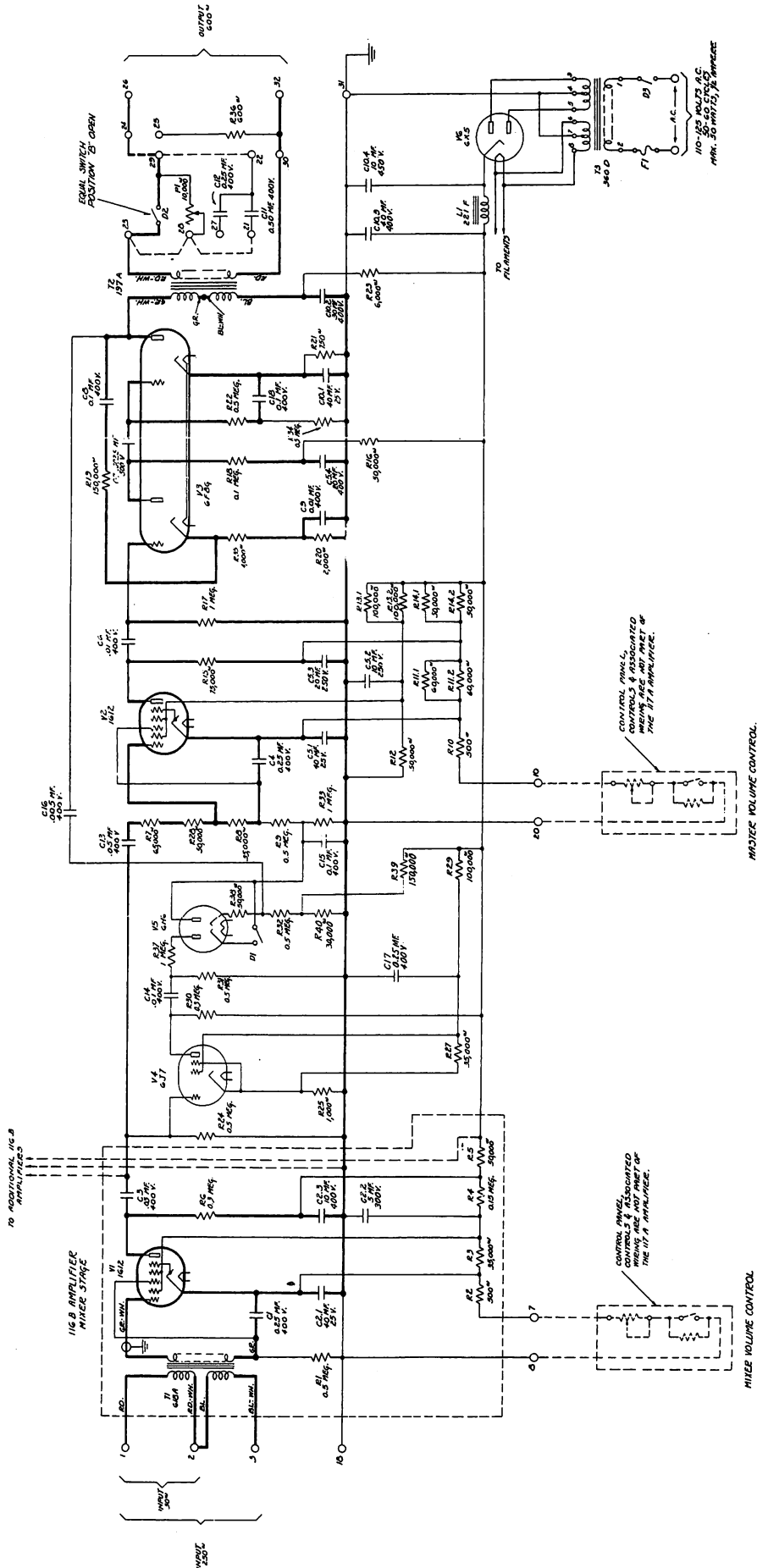
SUMMARY OF TYPICAL CHARACTERISTICS

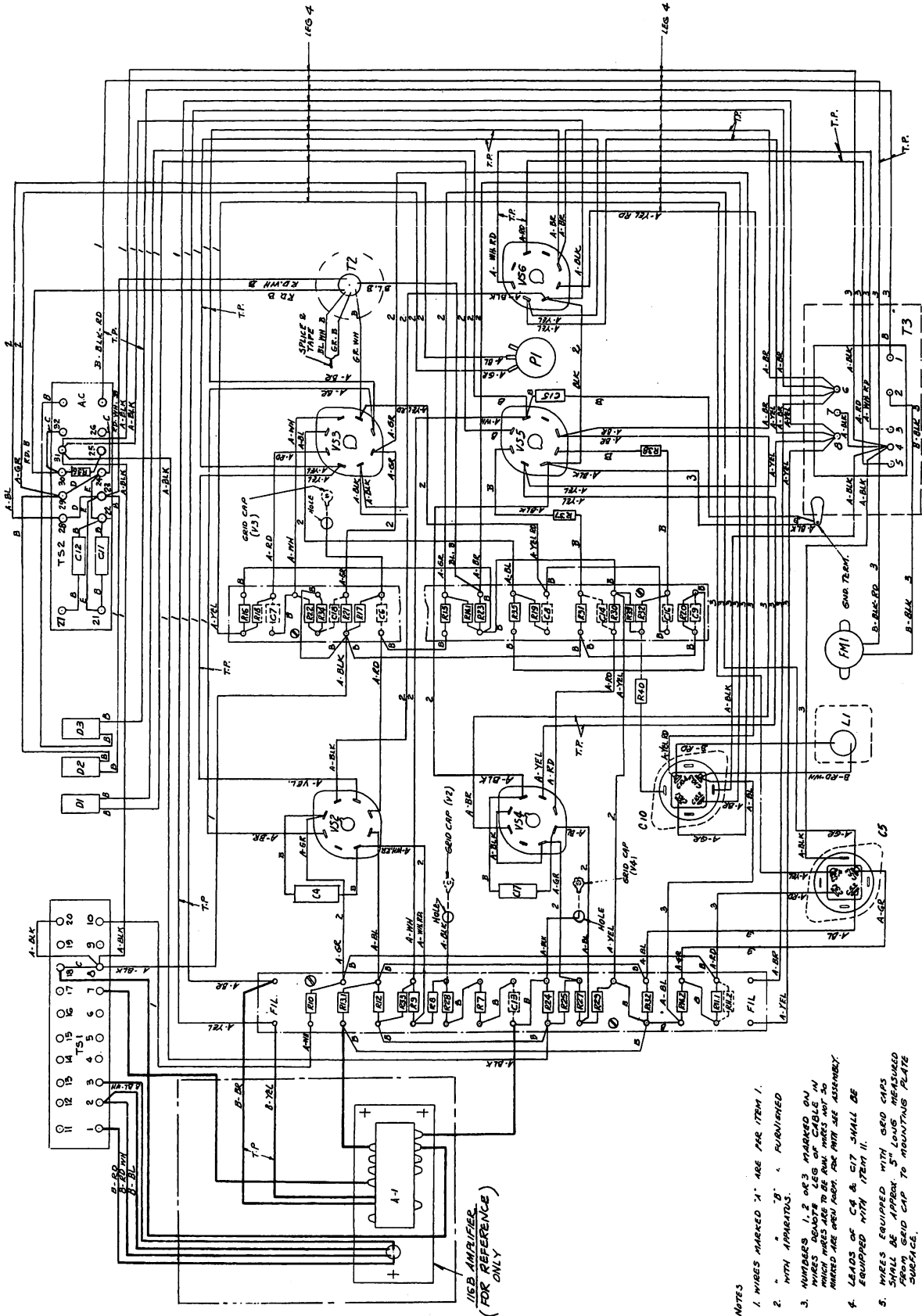
- Gain at 1000 Cycles..... 82 ± 2 db for 30 ohm source and 600 ohm load
 85 ± 2 db for 250 ohm source and 600 ohm load
- Source Impedance.....Nominal 30 or 250 ohm impedances
- Internal Input Impedance.....High with respect to nominal source impedances
- Load Impedance.....Nominal 600 ohm load
- Internal Output Impedance.....Approximately 170 ohms
- Output Level..... $+20^*$ db volume limiting, $+25$ db without volume limiting with approximately 5 per cent total harmonic distortion
- (Max. Single Frequency)
- Output Noise Level..... -32 db unweighted; -42 db with program (At Max. Gain)
- Frequency Characteristic.....Useful frequency response 35-10,000 cycles. Flat within ± 1 db from 35 to 10,000 cycles. See ESA-746167
- Power Required.....105-125 volts, 50-60 cycles, 50 watts
- Fuse.....Circuit fused for 6/10 ampere
- No. of Mixer Channels.....From 1 to 4—116B Amplifiers may be used with each 117A Amplifier to furnish from 1 to 4 mixer input channels
- Master Gain Control.....Gain control either local or remote achieved by varying bias of variable mu tube
- Mixer Gain Control.....Gain control of 116B Mixer Amplifier achieved independently by varying bias of variable mu tube at either local or remote position
- Expander Characteristic.....Expansion ratio $1\frac{1}{2}:1$
- Output Limiter Characteristic.....Output limited to $+20$ db for input levels as high as -22 db

SUMMARY OF MECHANICAL CHARACTERISTICS

- Chassis Length..... $18\frac{1}{8}$ inches. Height..... $6\frac{1}{4}$ inches
- Chassis Depth..... $10\frac{1}{8}$ inches. Approximate Weight 20 lbs.

*All levels are based on a single frequency power level of .001 watt as zero level.





- NOTES
1. WIRES MARKED "X" ARE FOR ITEM 1.
 2. "A" "B" & "C" PUBLISHED WITH APPARATUS.
 3. NUMBERS 1, 2 OR 3 MARKED ON WIRES INDICATE LEGS OF TERMINAL STRIP. WIRES MARKED "D" OR "E" ARE FOR REFERENCE ONLY. WIRES MARKED "X" ARE FOR REFERENCE ONLY.
 4. LEADS OF C4 & C7 SHALL BE EQUIPPED WITH ITEM 10.
 5. WIRES EQUIPPED WITH GRID CAPS SHALL BE APPROX. 5" LONG MEASURED FROM GRID CAP TO MOUNTING PLATE SURFACE.
 6. WIRES MARKED "C" IS FOR ITEM 10.
 7. WIRES MARKED "D" IS PER ITEM 10 ON FRONT OF TERMINAL STRIP.
 8. WIRES MARKED "E" ARE FOR REFERENCE ONLY.
 9. WIRES MARKED "X" IS PER ITEM 1 (BLK) ON FRONT OF TERMINAL STRIP.