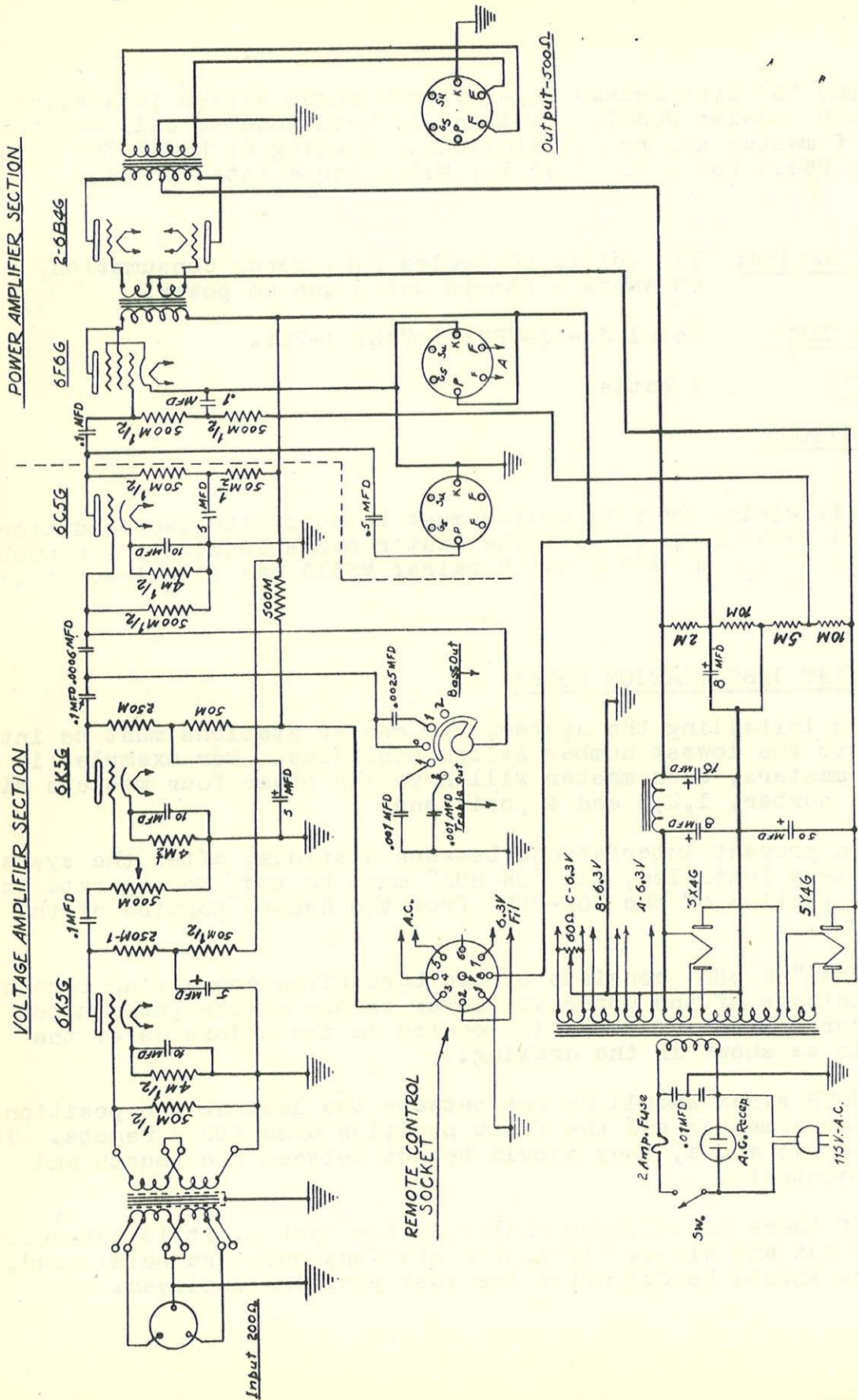


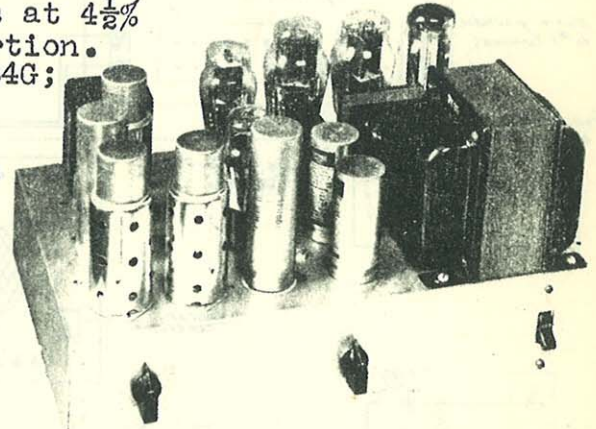
POWER AMPLIFIER SECTION

VOLTAGE AMPLIFIER SECTION



SPECIFICATIONS

GAIN: 120 db. at 400 cycles.
 INPUT IMPEDANCE: 500 C.T.; 200 C.T., or 50 ohms.
 OUTPUT IMPEDANCE: 500 ohms C.T.
 OUTPUT RATING: 15 watts at $2\frac{1}{2}\%$ total harmonic distortion. 20 watts at $4\frac{1}{2}\%$ total harmonic distortion.
 TUBES: 2-6K5G; 1-6C5G; 1-6F6G; 2-6B4G; 1-5X4G; 1-5Y4G.
 POWER CONSUMPTION: 150 watts.
 VOLTAGE: 105-125 Volts, 50/60 cycles
 DIMENSIONS: 15"L x 9"D x 8"H.
 SHIPPING WEIGHT: 36 Lbs.
 FINISH: Cadmium plated chassis.



The power output section is provided with facilities for connecting from one to three additional model P015 power amplifiers similar in design to the power section embodied in the PA-15 amplifier.

THE EQUALIZING OR COMPENSATING CIRCUIT is inserted in the final stage of the voltage amplifier section and consists of specially designed non-resonant circuits. This compensating network has been arranged to give five positions of frequency equalization as follows: Two steps of attenuation at 30 cycles of 10 db. per step and two steps of attenuation at 10,000 cycles of 15 db. per step. This attenuation curve does not affect the response at 400 cycles in any of the four positions and will give a gradual attenuation both sides of this point to the selected equalization.

THE POWER OUTPUT amplifier section of this unit contains the power supply for all filament, bias and plate voltages of both the voltage and power amplifiers. Provisions have been made in this section for supplying filament and plate voltages, when required, through a receptacle on the rear of the chassis.

THE INPUT to the power amplifier is connected to a receptacle located on the rear of the chassis for paralleling one to three additional model P015 power amplifiers when increased power output is desired. This input circuit is connected to a driver stage of amplification transformer coupled to a push-pull stage of amplification which employs two triode power tubes operating at fixed bias.

The care in design of circuit components and layout of the PA-15 amplifier results in an output having a flat frequency response, but of more importance an output in which all of the harmonics arithmetically added result in a distortion factor not greater than 2.5% under any load condition up to the rated output.