

3 TUBE 3 WATT DIRECT COUPLED AMPLIFIER

The direct coupled amplifier is always a difficult type of amplifier to construct and keep in adjustment, but is presented here for the more ambitious constructor. As you know, the direct coupled circuit consists of the plate of an amplifier tube directly connected to the grid of the next amplifier tube, thereby allowing a complete transfer of signal variations with a minimum of frequency distortion. With the proper choice of tubes and transformers, a high fidelity amplifier can be constructed when properly balanced. This balancing adjustment consists of varving **R-2, and the semi-adjustable resistor set to such a position that 45 volts can be measured across R-5 by means of a vacuum tube voltmeter.** Three watts undistorted power output can easily be obtained with any phonograph pickup or radio tuner connected to the input.

Parts List

C-1	10 mfd 25 v. elec. cond.	R-7	25,000 ohm 10 watt res.
C-2	20 mfd 250 v. elec. cond.	T-1	Output trans: 2500 ohm to voice coil 5 watt
C-3	20 mfd 450 v. elec. cond.	T-2	Power trans: 325-0-325 v @ 75ma 5 v @ 2a 6.3 v @ 1a 6.3 v @ 1a
C-4	8 mfd 600 v. elec. cond.	L	Filter choke 200 ohm 75ma
C-5	.05 mfd 400 v. paper cond.	J	Input jack
R-1	500,000 ohm vol. control	sw	SPST switch
R-2	3000 ohm $\frac{1}{2}$ watt res.	Socket	3 octals
R-3	5000 ohm 25 w semi-adj. res.		
R-4	1000 ohm 10 watt res.		
R-5	100,000 ohm 1 watt res.		
R-6	20 ohm 5w center tap.res.		