



Tubes: The filaments of the tubes are connected in series in two groups as shown in the diagram. The 6J7, 2-6C8 and 4-25L6 tubes are in one line. The 2-25Z6 tubes and the Ballast K67A form the other series. If one tube burns out the other tubes in the same line will not light. All tubes should be tested and only the defective ones need be replaced.

CAUTION: Do not under any circumstances, connect a "Ground" to the chassis of the AD-10 Amplifier.

The model AD-10 is a 10 watt P.A. Amplifier for use on either A.C. or D.C. It is provided with: 2 input channels (#1 for Microphone - Velocity or Crystal type, #2 for Phono-Pick-up - High Impedance type), Tone Control; Universal Output for Speakers.

Power Rating: 105-125 volts, either A.C. or D.C., Consumption 100 watts.

Tubes Used: Total 9, 1-6J7, 2-6C8G, 4-25L6, 2-25Z6, 1 Ballast K67A, 1-25 watt Indicator Bulb.

Connections: Phonograph The low gain input terminals for high impedance type phonograph are located at the left on the rear panel. A shielded lead is advisable to reduce noise and hum pickup. The shield should go to #1. #2 is the live or grid terminal.

Microphone: A Velocity, Crystal or Velotron Microphone may be used and should be connected by means of a single conductor shielded cable and the screw connector located above the input terminal strip. The female connector supplied with the amplifier should be fitted to the mike cable as follows:-

1. Skin outer rubber covering about $3/8$ inch exposing the shield.
2. Remove all cotton sleeving which in some cable is present over the metal shield.
3. Remove the exposed shielding up to the sleeve making sure to bend back over the sleeve all metal wires from the end of the shielding.
4. Skin inside rubber covering about $1/8$ inch from the sleeve exposing about $1/4$ inch of the conductor.
5. Insert the cable thus prepared into one part of the connector, drop the spring washer into the recess, place bakelite washer over it, allowing the conductor to pass through the eyelet.
6. Clean and solder the conductor to the eyelet, cut off excessive wire and tighten the set screw over the sleeve.
7. Never use soldering paste or acid on any microphone connection. Use rosin-core.

Output: The five prong sockets marked "Speaker" on the rear of the amplifier, are for connections to 2 speakers havint their own P.M. fields or exciters. Only the 2 voice coil leads are used as shown in the diagram. Any combination of speakers or lines may be connected to the terminal strip marked "Output" as follows:- Terminal #1 is "common", #2 is two ohms, #3 is four ohms, #4 is nine ohms, #5 is fifteen ohms and #6 is 500 ohms.

Power Receptacle and Fuse: An 110 volt power receptaclb is located on the rear panel for use with speaker field exciter, phono motor etc. It is controlled by the master switch on the front panel. A 2 ampere fuse is mounted on the rear, under a protective cover. If the fuse has blown, the wiring and tubes should be examined for possible trouble before a new fuse is inserted.

NOTES: Protective Lamp If the lamp mounted with the tubes lights up, it is a warning, indicating that some part of the equipment is "Grounded". This should be corrected before attempting to operate further. On D.C. if there is no response or on A.C. if there is a loud hum, reverse the polarity of the line cord by removing the plug, giving it a half turn and re-inserting into power outlet.