

## GENERAL WIRING PRACTICE

Assembly of the Stereo 35 is exceptionally simple when compared to that of the other kits. The circuit board are supplied with all components mounted, and the remaining parts arranged on the chassis in an open, uncluttered way that makes wiring quick and easy. The construction of the Stereo 35 should take no more than few hours.

When you unpack the kit, check the components against the parts list first. You can identify unfamiliar components by matching them to parts illustrated in the pictorial diagram supplied.

Have the proper tools at hand before beginning to build your kit. You will need a pencil-type soldering iron of 30- to 60-watt rating; a long-nosed pliers; diagonal cutters; and a screwdriver. If you have a soldering gun, it should be used with care, especially when working on the circuit board, because of its higher than necessary heat output. Although not essential, a wire-cutting and stripping tool will help considerably; these are available for less than a dollar.

The only procedure involved in building a Dynakit which requires a bit of technique is soldering, and this is quite easy to master. There are four steps to making a good solder connection:

1. Make a good mechanical connection.
2. Heat both parts of the connection with the iron.
3. Apply solder to the connection until it melts and runs.
4. Allow the connection to cool undisturbed.

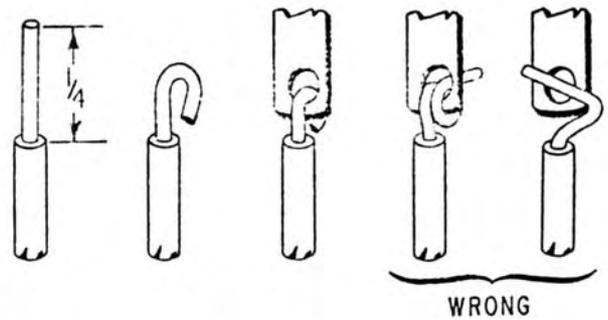
**ALL SOLDERING MUST BE DONE WITH ROSIN CORE SOLDER.**

There is no warranty on any equipment in which acid core solder has been used. Make sure that the solder you use is plainly marked "Rosin Core". If you have solder on hand of doubtful origin, it is wise to obtain a new roll of 50/50 or 60/40 rosin core solder.

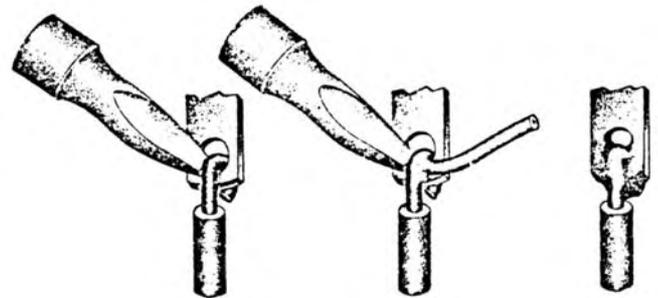
Whenever a connection is to be soldered, the instructions indicate this by the symbol (S). If this symbol is not shown after a step, further connections must be made to the same point before soldering.

A number of steps in the instructions begin, "Connect one end of a wire...", with the length of the wire specified. In each case, first cut a piece of wire to the correct length from the roll supplied with the kit and then remove about  $\frac{1}{4}$ " of insulation from each end before making the connection. The leads on components should be trimmed as they are used, the length chosen being that which permits a connection to be made from point to point without strain on terminals or components. The lead "dress", that is the manner in which the wiring is arranged as it goes from one point to another, should follow that shown in the pictorial diagram as closely as possible. Care must be exercised to see that uninsulated wires do not touch each other, and cannot do so through vibration or sagging, unless of course, they are connected to the same point. It is especially important that uninsulated wires and component leads or terminals do not touch the chassis or bottom plate accidentally.

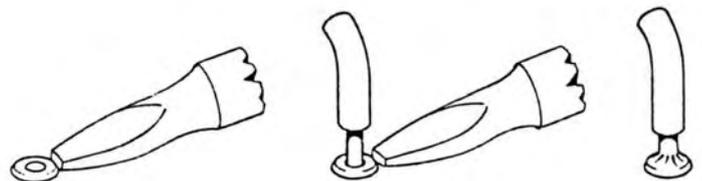
Check your work after each step, and, when you are satisfied that it has been correctly done, mark the space provided and go on to the next step. Examine the pictorial diagrams often; if you check your work methodically, your amplifier should work as soon as the wiring is complete.



One of the best ways to make a good mechanical connection is to bend a small hook in the end of the wire, and then to crimp this hook onto the terminal to be connected. The amount of bare wire exposed at the end need to be exactly  $\frac{1}{4}$ -inch; however, if it is too long, there is danger of the excess touching another terminal or the chassis. There is no need to wrap the wire around the terminal more than one time, as this makes a connection that is much more difficult to remove if an error has been made



To transfer heat from the iron to the wire and terminal, the tip of the iron should be kept brightly tinned with solder. If this is properly done the first time the iron is used, the tinning may be maintained by wiping the tip with a cloth or sponge every few minutes while soldering. When correctly tinned, the tip will heat both parts of the connection almost immediately. Solder should then be applied directly to the parts to be soldered, as shown in the middle illustration above, and both iron and solder removed as soon as the solder flows freely.



The circuit boards of the Stereo 35 are supplied with all components (resistors and capacitors) already mounted and soldered in place. The circuit boards are connected to the other sections of the amplifier channels by soldering wires to eyelets on the boards. These eyelets, which are numbered for identification, are filled with solder already. To solder a wire to them, they are first heated with the tip of the iron, and the end of the wire inserted as soon as the solder in the eyelet flows. A correctly made connection looks like the illustration at the right, above, which shows a smooth transition from eyelet to wire.