15. Give the board a good inspection. Check for possible solder bridges. Trim off excess component lead lengths on foil side. This completes construction of the main PC board. Set it aside for now and continue with the display board.

Display PC Board. This is a double sided board with plated through holes and only needs to be soldered on the bottom. Refer to the diagram in this manual for parts placement as well as silk screening on the board itself.

1. Install the four IC sockets and solder. (The ICs will be installed later.)
2. Install the MOlex Soldercons for DIS1 through DIS4. The Soldercons should be cut into strips of nine, inserted into the plastic nest, inserted into the top of the board, and soldered on the bottom of the board. After soldering, the top connecting piece of the Soldercon may be bent and broken off. Some care should be used in lining up the Soldercons before soldering to insure a good fit for the IEE 3785R displays.
3. Install the resistors on the board and solder. Note that they are installed in an upright position.
4. Install the ceramic capacitors on the board and solder.
5. Install solid wire jumper wires in the holes marked H,C,P,G,D,J,K,U,V,X,Y,Z,A, B,F and E. The jumpers are made from scrap leads (about 1/2") saved from components. They should be bent in the shape of an "L" and installed in the top (Front) of the main board. The jumpers should extend parallel to the display board and point downward.
6. Carefully install the IEE3785R displays in the Molex Soldercons observing the proper orientation, making sure all of the leads are properly inserted, and seeing that there are no shorts between adjacent leads. If the leads on the 3785R displays are too long, trim them to the necessary length. Check photo of front panel for proper orientation. The decimal points should be down and on the right side as viewed from the front.
7. Give the board a good visual inspection. Check for possible solder bridges and poor solder connections. Trim off all excess lead lengths. This completes construction of this PC board.

Mating the Main and Display PC Boards. The main PC board and the display PC board must be connected together. The solid wire jumpers previously soldered to the display board are for this purpose. (See photo of front panel.)
1. Insert the solid wire jumpers from the display board to the corresponding holes on the main PC board. The display board should be at right angles to the main board. With the solid wires inserted into the proper holes on the main board, push the display board down until it is in contact with the main board. Hold it in position and solder the jumper leads on the bottom of the main board. Trim off excess lead lengths.
2. This completes the mating of the main and display boards.

Cabinet and Chassis. The cabinet consists of the chassis, the front panel and the cover.
1. Install the four 1/4 inch main PC board standoffs using the holes in the chassis. The screws are inserted from the bottom of chassis and threaded into the standoff. The screws should extend   out of the standoff so a nut can be added later on.
2. Install the loudspeaker in the top cover using the black 4-40 screws and nuts provided.