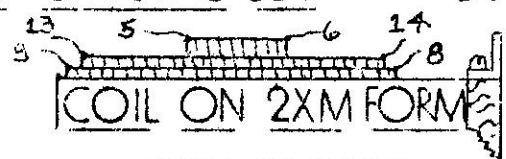
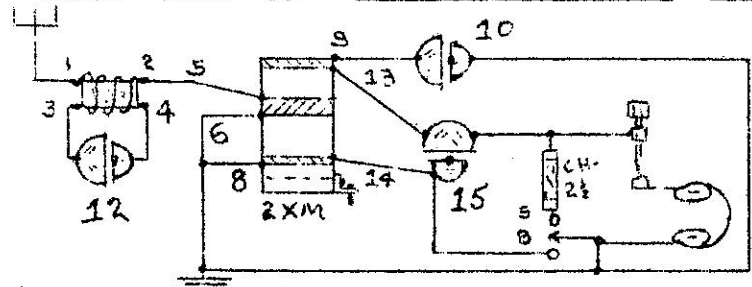
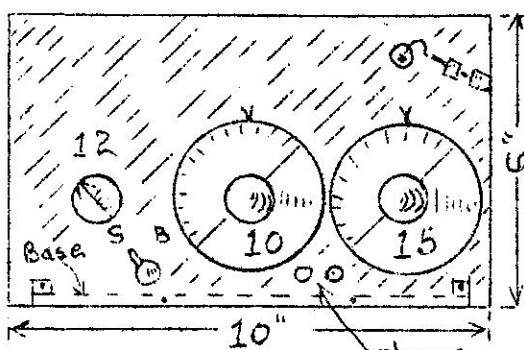
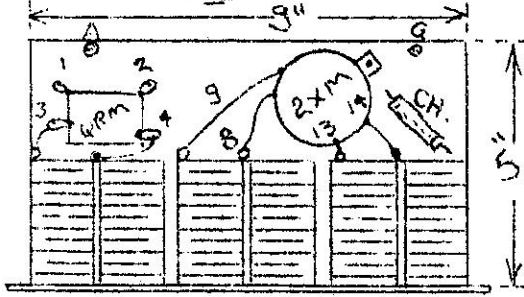


MRL NO. 23 COMBINATION DX CRYSTAL SET DP-51



LIST OF PARTS

- 1 Compo. Panel 3/16" x 6" x 10"
- 1 Plywood base 1/4" x 5" x 9"
- 1 #23 Celluloid coil (MRL \$1.00).
- 1 MRL QRM Coil - or build.
- 3 .0005 or .00035 var. cond. (12), (10), (15).
- 1 MRL CH-2 1/2 SW choke (or BC choke) 2-3" dia.
- 1 Crystal stand 2 Binding posts (A), (G).
- 1 MRL Steel Galena crystal Hardware, etc.
- 2 Phone tip jacks (or Binding posts).
- 1 Single Pole-Double Throw panel switch.
- 1 Cabinet, if desired Good Phones, etc.



LAYOUT-Panel & Base.
Scale 1/4" to 1"

Lay out panel & base. Mount parts. Arrangement shown is the best. COILS: QRM Coil 1" dia. by 1 1/2" long, 110 Ts #32 enamel. Space-wind over this about 15 Ts #24 DCC or #22 DCC - and call it (1-2). On 2XM Cell. form (or form 2" by 4 1/2" long...) wind coil (9-8) of 75 Ts #22 DCC wire, and anchor ends down by running tape around last turn, and under adjacent turn. No taps required on any coils of this set. Over this, wind a piece of wrapping paper 2" wide by 10" long, and cement ends by MRL Light coil cement. Put rubber band over paper till it dries. Then, wrap 75 more Ts #22 over this and anchor down.

Over this put a piece of wrapping paper 1" wide by 10" long, cemented at ends, and usual rubber till it dries. Then wrap 10 Ts #22 DCC over this in center of coil. Paint all edges with cement to prevent coils from slipping. Mount the coil in upright position on base, and solder down leads.

OPERATION: Set Cond. (12) to zero. Put switch on "B" (which means Broad tuning.) Tune stations in with Conds. (10) & (15). When tuning in weak stations, re-adjust the Crystal after station is obtained. Always use the fine catwhisker on a distance crystal set. If stations tend to mix up, if you are in a city or near a hi-power station, put switch over to "S", (which means selective). If station still bothers you, turn the cond. (12) till the stn. goes out. When you find what station bothers you, it is a good idea to tune the whole set to this station - and then, slowly bring the cond. (12) over till the stn. goes out or is weakened. Then, leave this cond. (12) on this setting all the time, and tune set with other 2 condensers.

This is a very flexible little set, and can be used in the city or out in the country. It is a combination of our #3 and #9 crystal sets.

Be sure to use good phones. When making a ground connection, hook everything up that can be used for a ground, as water, gas-pipe, etc. and finally drive a 3 or 4 ft. galvanized pipe into the ground where it's moist and connect up with the others. Some use a galvanized pipe or galvanized wire dropped into a well - this will not taint the water. The more ground the better.

Sometimes we have had different results with an 85 my. choke coil for the 2 1/2 mhy choke - altho most good results have been obtained with the MRL Ch-2 1/2 SW choke.

MODERN RADIO LABORATORIES

Send stamped envelope when requesting answers to questions. Thanks.