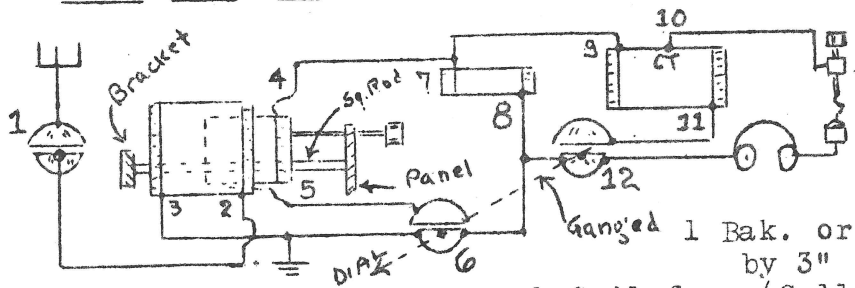
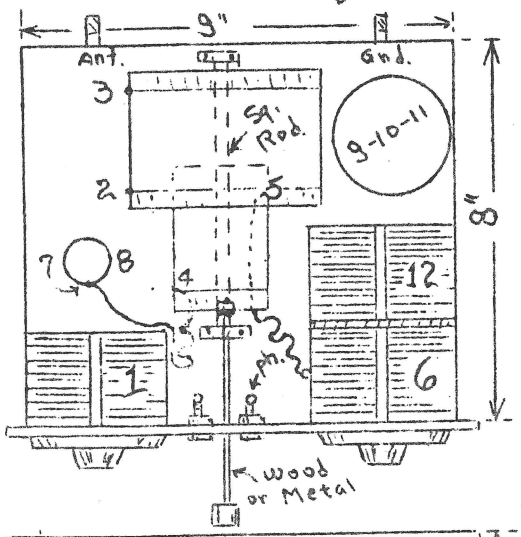
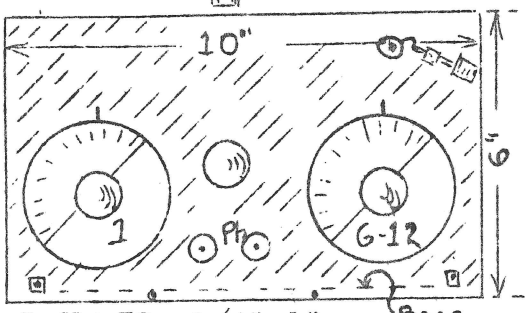
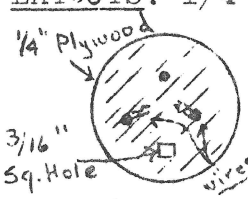
MRL NO. 21 - LOCAL SELECTIVE CRYSTAL SET DP-50







LAYOUTS: 1/4"-1"



LIST OF PARTS

1 .0005 Var.Cond.(1)
1 2-gang Cond..00035 (6-12)
1 Compo. panel 3/16" x 6" x 10".
1 Plywood base ¼" x 8" x 9"
1 Bak. or cardboard form 4" dia. by 3" long (2-3) 2 Binding posts.
1 Coil form (Cell.2XM) 2" x 3" long (4-5)
1 Coil form 1" dia. x 2" long (7-8) Bak-wood
1 Coil form 3" dia. x 3" long (9-10-11) Bak.
150 ft. #28 DCC wire 100 ft. #24 Enamel
2 3"dials or verniers 1 small knob (shaft)
1 3/16" sq. x 6" long slider rod MRL
1 Wood or metal shaft for knob - adj.coupling
Brackets to mount sq. rod for (4-5)
1 Crystal Stand 1 MRL Steel Galena Crystal
2 Phone tip jacks.

This set comes highly recommended by a Penn. customer. Several means are used to control selectivity, i.e., varying size of (7-8); pulling out Sec. coil (4-5); various tuning condenser adjustments; and by varying size of antenna. If located in the country, a very large ant. can be used to advantage.

Layout is clearly shown. Mount parts on the panel - using scale ¼"-1". Then attach base.

COILS: Coil (2-3)--On 4" Bakelite or cardboard tubing 3" long, starting on edge at (2) wind 80 Ts. #28 DCC wire. Anchor down with tape around last turn - under next to last. Coil (4-5)- Wind on form Bak.-Cardboard or MRL 2XM (cut off) - 81 Ts. #28 DCC starting at (5) near edge. If using 2XM form, take out rings after winding, with a little knock on the ends. Next, cut 2 wooden ends from box wood to fit snugly into ends of (4-5). Cut 3/16" sq. hole in location shown, and hole in upper part for shaft to run to front panel to knob. When coil is wound, fasten this in the end of (4-5). Also drill 2 holes in front end to take the leads (4-5) and use telephone cord for flexibility. Coil (7-8)- On bak.,cardboard form, or wood handle, 1" dia. x 2" long, wind 48 Ts #28 DCC wire. Later experiment with larger and smaller coil to see how it controls selectivity. Mount this upright on base. Now run square slider rod thru coil (4-5) and make brackets so coil fits in center of (2-3). Run shaft thru panel and put on knob. Sliding this in and out controls selectivity. Coil (9-10-11)- 3" in dia. x 3" long, Bak., cardboard, etc. wind with 90 Ts #24 enamel wire tapped at the 45th turn (10). Also mount this on base in upright position. Paint all edges with MRL Light coil cement to keep wires from slipping. This should be a very flexible set as far as selectivity is concerned.

You will notice a change in tuning when the knob is pulled out. You can find a certain spot where interfering stations disappear . You may mark this on the shaft for knob, and leave it there. Then, go ahead and log your stations for good. Use MRL Steel Galena crystal if possible. If set is used only for local work - a MRL fixed Iron Pyrites crystal may be used, - and placed inside of panel if desired. The brass rod inside of coil (4-5) does not affect tuning or loss to any extent.

When writing - please send stamped envelope for reply. MRL--MRL