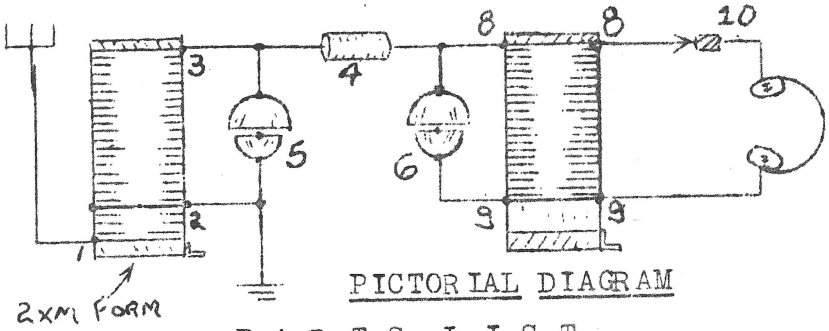
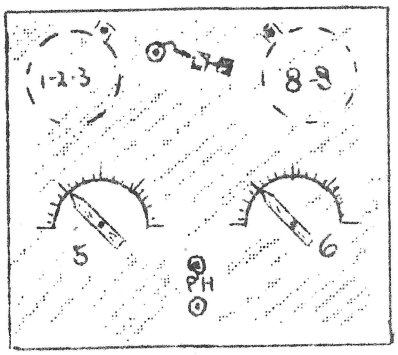
MRL IMPROVED CAPACITY-COUPLED CRYSTAL DP-62

(#6 - B.P. #17)



PICTORIAL DIAGRAM



PANEL LAYOUT. ¼"-1"

P-A-R-T-S L-I-S-T

2 #6 coils (1-2-3) &(8-9)
2 .0004 (or .00035-.0005) var. cond.(5)(6).
1 .1 mfd. tubular condenser (4).
1 Crystal stand & MRL Steel galena (10).
1 Compo. panel 1/8" x 7" x 8". 2 Phone tip jacks. 2 Bar knobs.
2 Scales to match knobs (not needed if 3" dials used).
2 Binding posts for rear of cabinet for Antenna & Ground.
5' 7/26 tinned-stranded antenna wire for hookup of parts. Cabinet.

(IF YOU MAKE COILS):

2 MRL 2XM coil forms with cement & mounting bracket.
100' #22 DCC wire. Screws, solder, etc.

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A variation of this circuit was used in some of the old Ship-board crystal sets for selectivity. It may still be used ahead of a tube circuit to increase selectivity. The condensers tune about together and thereby make a very selective arrangement.

LAYOUT: Take panel and layout centers for condensers, phone tip jax, and crystal stand. (MRL Fixed Iron Pyrites may be used if desired). Use 1/4" scale as shown. Drill holes- and countersinking holes for flathead screws for condensers, so knobs or dials won't rub. Mount parts.

COILS: On 2XM celluloid form, start winding at far end by looping piece of tape around 1st turn. Secure tape ends under 2nd & following turns. Wind on 90 Ts. #22 DCC and bring over a pice of wrapping paper to make point (2). Then continue winding 20 more Ts #22 DCC till you get to point (1). Cut off wire. Then, take one turn off and make a loop of another piece of tape. Secure this under next to last turn, pulling the turn firmly. Then, wrap the last turn around coil form again and pull wire thru loop of tape. Take up on both wire & tape till wire is held taut. Paint edges of coils with light Coil cement that comes with 2XM forms. Solder on lead at (2) for tap. ----With coil (8-9) use the same procedure, except do not add the 20 Ts . By means of brackets, mount finished coils on back of panel, far away from cond. as possible.

In our original circuit on BP#17 we used a ground wire from (2) to (9). You may use this if not too close to a station, but we prefer not to use it, as it broadens the stations a lot. It also interferes with tuning. A .1 mfd. cond. seems to be best for most purposes. You may use down to a .001 but with less transference of energy. A variable or midget cond. is not very good for coupling (4) as there is not enough capacity. It is not necessary to mount coils at right angles, as there must be a certain amount of coupling.

The primary of 20 Ts may be wound over the secondary if desired. Connecting the antenna at (3) tends to mix the stations up. One may, with a little experimenting - adapt this circuit to any location, near a station - or in the country. We would like to have report on results obtained on this set.

PLEASE NOTE: Changes made in DPs are the latest out. We are always experimenting and altering circuits. Buy DPs and get the latest data.

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