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NOTE ON THE USE OF TYPE "A" RADIO RECEIVER.

MODEL "TELEGRAPHIE MILITAIRE 1915."

Note sur l'emploi du récepteur radio.  
Modèle TM 1915 - Type A.

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NOTE ON THE USE OF TYPE "A" RADIO RECEIVER

MODEL "TELEGRAPHIE MILITAIRE 1915."

The type A radio receiver, model Telegraphie Militaire 1915, used for receiving signals sent by the aeroplanes, is made up as follows:

1st. A primary circuit composed of a 50 turn coil with take offs every 10 turns (switch p) in series with a 0.0005 microfarad variable air condenser.

The minimum capacity is obtained when the index is on the 0 of the scale; the maximum capacity when the index is on 90.

2nd. A secondary circuit composed of a coil with 4 take offs (switch S) and a variable air condenser, similar to that of the primary circuit.

The coupling between the primary and secondary may be varied by turning the secondary coil on an axis perpendicular to that of the primary coil.

The position of this secondary coil is shown by the index moving on the copper dial marked "MAX - COUPLAGE - MIN" and divided from 0 to 90.

When the index is on MAX and 90, both coils are parallel, i.e., the coupling is a maximum; when on MIN and 0, both coils are perpendicular, i.e., the coupling is a minimum.

The first of these positions will be used when listening in for signals; the second one will be approached as closely as possible for tuning, as will be further explained.

The detector circuit is connected with the terminals of the secondary coil; it is composed of a detector and the telephone receivers to which a condenser is connected in parallel.

The secondary circuit may be aperiodic or can be tuned to the wave length being received, at will.

In the first case, the small switch m must be turned on "Att" and in the second case on "Synt." The latter position switches the variable condenser in circuit, while the former cuts the secondary coil off.

DIRECTIONS FOR USE.

1st. Connect the antenna to terminal A, the ground connection to terminal T and regulate the detector as usual.

2nd.

LISTENING IN FOR SIGNALS.

Turn the small switch on "ATT", the switch S of the secondary coil on 40 and the adjustable coupling index on "MAX".

Then, by successively placing the switch of the left coil P on the points marked 10 - 20 - 30 - 40 - 50, turn the switch of the primary condenser (left one) from one side of the scale to the other.

Stop the switch and index on the positions that give the best reception.

Operate the condenser again after having placed the coupling index on the nearest position to "MIN" which gives reception good enough for regulating.

The regulation of the primary is best made when the coupling is loose.

3rd.

TUNING OF THE SECONDARY.

Turn the small switch on "Synt," and the coupling index towards "MIN" between 10 and 20.

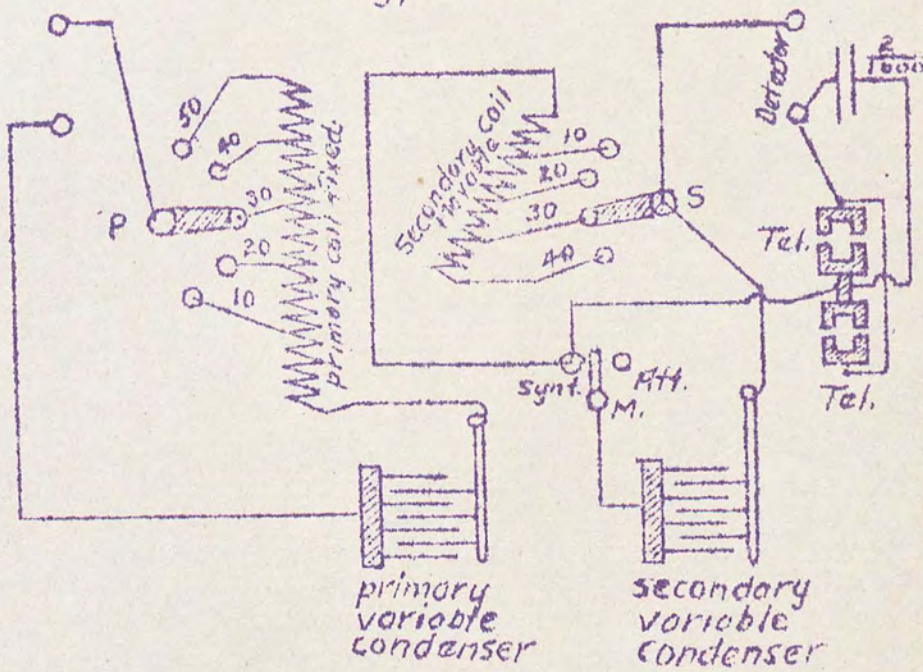
Try for the best reception by turning switch S of the right coil on 10 - 20 - 30 - and 40 while turning each time the secondary condenser from one side of the scale to the other (right condenser). Leave the switch and index on the positions that give the best result.

Operate the secondary condenser again after having placed the coupling index as near "MIN" as possible. The secondary tuning being obtained, increase the sound, if necessary, by slightly turning the coupling index towards the higher divisions.

To avoid too tight a coupling, which would no longer prevent interference, the index must not be turned too much.

If the wave length of the sending station is known, the tuning of the secondary will be made easier by using the calibration table, placed in the cover of the box and which shows, for each take off of the secondary coil, both limits of the wave lengths obtained by varying the capacity from its minimum value up to its maximum value.

Drawing of the Radio Receiver  
 Model T.M. - 1915  
 Type A.





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