

# Instructions for the use of the



## GENERAL

The Donle-Bristol B-6 is a supersensitive detector which can be used in any standard type of receiving set and will greatly improve the quality of reception and the volume of weak signals. On account of its high sensitivity this tube will bring in with good volume signals which would be inaudible with an ordinary "hard" detector tube. This detector will also greatly improve the tone qualities in any receiving set in which it is used. It has the usual elements of filament, grid and plate but instead of these being inclosed within an evacuated bulb, the bulb contains a rare atmosphere which is directly responsible for the extraordinary sensitivity of the tube.

## GRID RETURN

This tube will operate perfectly in any detector circuit provided the grid return is connected to the positive terminal of the filament at the socket. This is the only particular requirement that must be observed.

## PLATE VOLTAGE

In order to secure the very best operation with the B-6 detector it is desirable that the B-battery voltage should be carefully adjusted for the particular tube used. This may be done by moving the B-battery terminal to different clips on the B-battery block. In general it is recommended that the highest B voltage be used which does not introduce noise into the reception.

## GRID LEAK AND CONDENSER

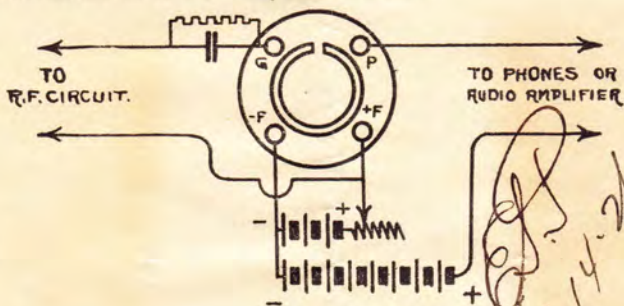
The grid leak and condenser to be used with the B-6 detector should be of from  $\frac{1}{2}$  to 3 megohms and a capacity of .00025 mfd. respectively. Under certain conditions the tube may be used without either of these parts.

## OPERATING INSTRUCTIONS

When the tube is in operation the B-battery voltage should be adjusted for the best signal volume and quality. If a hiss or rushing sound is audible in the loud speaker or telephone receivers it is an indication that either the B-battery voltage or filament current is too high. When this occurs the filament current should be reduced. If this does not eliminate the hiss completely, without destroying the signal, the B-battery voltage should be decreased and the filament current re-adjusted. It will be found possible by the proper adjustment of B-battery voltage and filament current to secure signals of maximum volume and quality without any noise from the detector. When the B-battery voltage has once been adjusted to the proper value it will require no further changes or alterations. Furthermore, when the B-battery voltage is adjusted to the correct value it will be found that the filament current adjustment is not critical but in order to insure a long filament life the filament current should be maintained at the lowest value consistent with good signals.

## SUMMARY

Filament volts	5
Filament amperes	0.25
Plate volts	22½ to 90
Grid leak	½ to 3 megohms
Grid condenser	.00025
Grid return	Positive—to socket
Rheostat resistance	15-20 ohms



Manufactured by

**THE DONLE-BRISTOL CORPORATION**  
Meriden      :-      Connecticut