Improving Your RADIO

OF COURSE! You want to improve your radio.

Everybody is doing it! BUT, HOW?

Everyone knows that a common cause of poor reception, disturbing noises and distortion is run down B batteries or uncontrollable current supply from an improperly designed B battery eliminator.

To get the greatest distance, most volume and clearest tonal quality possible with any receiver it is absolutely necessary to deliver the proper plate current to the tubes. A change in tubes necessitates a change in plate current to obtain the highest results. This is very important especially in the high power receivers with the super-sensitive detector and power tubes now on the market. The minute variations in B and C current requirements for best reception cannot be delivered from dry battery blocks nor from battery eliminators with uncontrollable taps.

A Perfect B Supply

It is well known that the one dependable source of electric current is the central station that operates night and day generating power to light our lamps. But it does not supply power to the home in the form usable to operate a radio.

The Webster unit has been well demonstrated for making your house lighting current usable in place of B batteries and greatly improves reception on any receiver.

It consists of a specially designed shielded transformer which steps up the 110 volt A.C. house lighting current to the proper value; the Raytheon *full wave* rectifier to change the alternating current to pulsating direct current; and the Webster "Duo-Choke" (patent pending) filter circuit equipment which smooths out the pulsating current so that the lighting circuit *hum is completely filtered out from the loud speaker.* It provides power that never runs down. Maintained at a constant value ready for instant use day or night.

Think what this means to your enjoyment of radio. It means clearer tone, greater distance, more volume,—no noises nor distortion from run down B batteries, no acids to spill, no expense of B battery replacement and the Raytheon has no filament to burn out. Once a Webster is attached to your light socket and the current controls adjusted, it gives you the *proper plate current for years to come.* Costs less to operate than *one* 10 watt lamp.

You will not hide the Webster power unit in a corner. On the stand beside the radio set, its beauty adds a touch of distinction.

While experimentally tube rectifying "A" battery eliminators can be built, and for sets employing tubes similar in characteristics to the UX-199, with filaments wired in series, however, from a practical standpoint filament "A" power units should be built distinct from *plate supply* units. This booklet shows power unit for PLATE CURRENT supply.

"B" and "C" Current from One Unit

Size 5¾" high, 6⅛" wide, 11½" long over-all

The "Little Giant B-C" power unit has five voltages under variable control. It is especially designed for the super-power receivers with extremely sensitive detector and power tubes. To get full value of tone quality, volume and distance from any radio receiver, it is essential to keep the plate current constant at the proper value. When the line voltage of the lighting current goes up or down, as is often the case, especially where supplied by isolated electric plants, with the "Little Giant B-C" the slightest variation is automatically balanced; that is, any variation in B voltage is automatically offset by a proportionate variation in negative C voltage, resulting in the plate current value remaining balanced at the point of best tone quality.

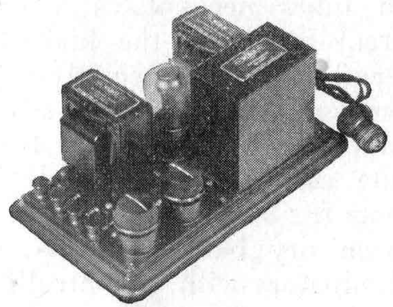
The "Little Giant B-C" is equipped with the Raytheon B. H. tube, which has a capacity of delivering up to 85 milliamperes at 200 volts. It has withstood tests at that value for more than 3,000 hours without noticeable depreciation.

The "Little Giant B-C" under load delivers a surplus current supply and ALL TAPS ARE MINUTELY CONTROLLABLE TO THE EXACT REQUIREMENTS FOR BEST QUALITY OF ANY RADIO RECEIVER now on the market. The adjustments are easily made and when set require no further attention. The detector B supply is variable from 5 to 90 volts; the intermediate amplifier B supply from 20 to 125 volts; the power tube B supply from 125 to 180 volts; the intermediate C supply from 0 to 45 volts; and the power tube C supply from 0 to 45 volts.

This unit is finished in grained walnut finish iron case with bronze and black etched end panels with the markings for the terminals and controls etched in the panels.

Price complete with Raytheon B. H. tube....$50.00

"Popular-B" Power Unit



Size 5" high, 6⅛" wide, 10⅝" long over-all

"POPULAR-B"—Open type—the Webster shielded transformer, "Duo-Choke," condenser block, tube socket and variable controls are mounted on a raised metal base. All connecting wires are concealed in the base which is enclosed with a felt protected iron bottom. All parts in circuit insulated from supporting base.

The detector supply may be varied from 5 to 75 volts; the intermediate amplifier supply from 20 to 120 volts and the power tube tap delivers up to 135 volts. This unit delivers ample noiseless "B" current for the detector supply, intermediate amplifier supply and power tube supply for any transformer—coupled,

Webster "Duo-choke" with Raytheon Rectifier

Power Supply Unit

More volume, better tone quality and greater distance with more than 90% saving in cost over operation of B batteries. Operates any Radio Receiver from electric lighting circuit.

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