

#### The "SUPER-WASP" Short-Wave Receiver Kits

No. K-115 for Operation From the A.C. Lamp Socket No. K-110 for Operation on Batteries



BADE MAKE

Kit of Parts
for

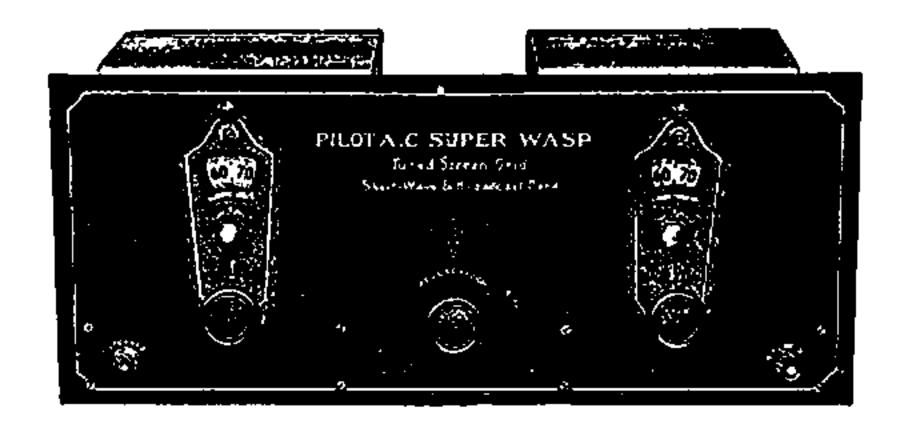
A. C.

"Super-Wasp"

Cat. No. K-115

Code: YUGIT

\$65.00



Kit of Parts for Battery operated "Super-Wasp" Cat. No. K-110 Code: ZWAGS \$52.50

There is nothing in radio more thrilling and exciting than the short waves. Radio fans who have constructed the most expensive and complicated of regular broadcast receivers and who think there is nothing else in the "game" to interest them are discovering a new and fertile field for amusement in the regions below 200 meters, where actually thousands of stations are transmitting. With ridiculously cheap and simple receivers, people all over the country are picking up short-wave broadcasting stations in Europe, Siberia, Australia and many other places that exist for most of us only in geography books. Heretofore it has been an accomplishment for a man in New York to hear Los Angeles on even a six or eight-tube set: now a short-wave fan in New York considers the West Coast local, and tries to reach for Khabarovsk, Siberia, where the Russians maintain a fine broadcasting station!

Most abort-wave sets put out in kit form have been highly critical straight regenerative affairs. It was not until the advent of the Pilot Super-Wasp that short-wave receivers graduated from the 1921 stage and grew into modern instruments possessing some of the numerous refinements that have been built into regular broadcast sets.

In addition to its use of the screen-grid tube and double shielding, the Super-Wasp works ON ALTERNATING CURRENT. A neat, compact power unit (the Pilot K-111, furnished separately) supplies all the filament, grid and plate voltages. The A.C. "Super-Wasp" allows you to enjoy the unlimited thrills of short-wave reception with all the conveniences of full lamp socket operation.

Satisfied owners attest that the "Super-Wasp" is the best short-wave receiver because of the following points:

- full A.C. OPERATION.
- 2) Increased sensitivity and selectivity made possible by TUNED screen-grid R. P. stage.
- 3) Universal wavelength range. Tunes from 14 to 500 meters. An excellent broadcast receiver as well as the finest of all short-wave instruments.
- 4) Absolutely no hand capacity effects.
- 5) All metal chassis-completely shielded.
- 6) inexpensive.
- Ability to bring in short-wave broadcasting stations better than all previous short-wave sets.

Electrically, the Super-Wasp consists of one stage of tuned radio-frequency amplification with a screen-grid tube (it is the only set so constructed) followed by a regenerative detector, one stage of resistance coupled audio and one stage of transformer coupled, with an output transformer to protect the earphones or loud speaker. The parts of the radio-frequency and detector stages, respectively, are enclosed within individual shield cans, fixted with removable tops for the easy insertion and removal of the plug-in coils.

The front panel and sub-panel are of metal, the former being finished to resemble walnut graining. Along with the shield cans, they are accurately drilled with all the necessary mounting holes, and fit together perfectly. The set can be assembled with a screwdriver and a pair of pliers. The front panel is 18 inches long and 7 1/2 inches high, the whole set, when assembled, being 9 1/2 inches deep.

The Super-Wasp kit contains everything necessary for the assembly of the set, including all screws, nuts, washers, special hardware, wire and ten plug-in coils. No power pack is supplied, but the Pilot K-111 is especially recommended. The Super-Wasp uses a Pilotron P-224 (A.C. screen-grid tube) and three of the new Pilotron P-227's, which are the only A.C. tubes that will work in a short-wave receiver. They were developed particularly for the Super-Wasp.

The famous Pilot plug-in coils, fitted with colored handles, are used in the Super-Wasp, ten coils altogether being supplied. They are used in pairs (one in the R. F. stage, the other in the detector stage), the wavelength ranges being as follows: red coils, 14 to 27 meters; orange, 26 to 50; yellow, 50 to 100; green, 100 to 200; and blue, 200 to 500. Smooth action vernier dials are fitted to the two tuning condensers to enable the operator to tune in distant stations. Regeneration is controlled by another variable condenser, located between the two tuning condensers. The tuning is quite simple, and can be mastered after a few evenings of practice.

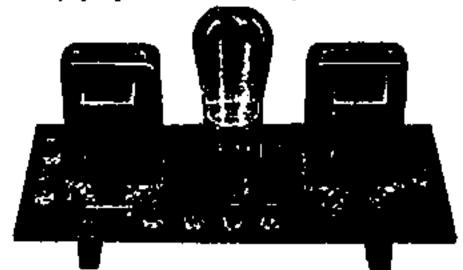
There is also a Super-Wasp model for operation on batteries. This has all the features of the A.C. set except that it uses one P-222 screen-grid tube and three P-201A tubes, and requires as the source of power a six-volt storage "A" battery and at least three 45-volt "B" batteries. The audio amplifier comprises two straight transformer coupled stages. The appearance of the battery set, the K-110, is practically identical with that of the K-115, there being one additional knob on the front panel for a filament theostar.

#### Booster Unit for A.C. Super-Wasp

Because of its excellence on the 200-500 meter range (with the blue-ring coits), the A.C. Super-Wasp is used by many people as a

regular broadcast receiver. However, in some locations, removed a considerable distance from broadcasting stations, the volume is not quite enough for reliable loud speaker results and additional audio amplification is necessary. (Remember that the Super-Wasp uses only four tubes, as compared with seven and eight in regular broadcast sets.)

To meet this condition, we have brought out a kit of parts for a "booster unit," which is merely a single stage audio amplifier using a P-171A tube. This plugs right into the output



jack on the front panel of the A.C. Super-Wasp, and obtains all its power from the K-111 power pack. The kit contains one input

and one output transformer, tube socket, biasing resistor, by-pass condenser, loud speaker jack, binding posts, a drilled bakelite base panel 10 x 4 ¼ inches, and two supporting brackets, with all necessary hardware. Assembling and wiring this "booster" takes about a half hour. The unit gives the Super-Wasp as much "kick" on the broadcast band as larger and more expensive broadcast sets, and is a desirable addition to the receiver.

"Booster Unit" for A. C. Super-Wasp-Cat. No. K-120 ... Code: 2USTG \$15.00

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### DATA SHEET No. 6

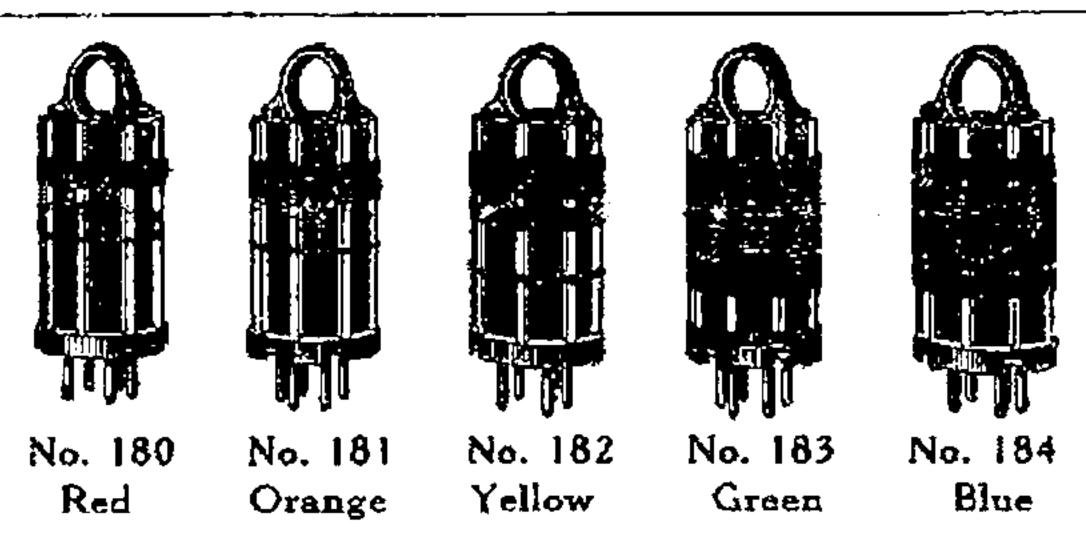
# Plugin Coils

17 to 500 Meters



WORLD'S
LARGEST RADIO
PARTS
MANUFACTURER

## PILOT ELECTRIC MFG. CO., Inc., 323 BERRY ST., BROOKLYN, N. Y., U. S. A.

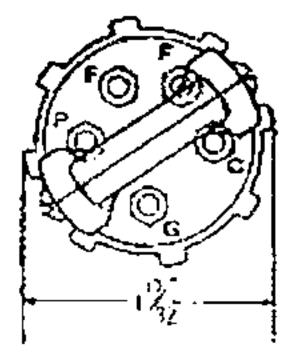


17 to 30-meter plugin coil, red ring
30 to 52-meter plugin coil, orange ring
48 to 105-meter plugin coil, yellow ring
73 to 202-meter plugin coil, green ring
200 to 500-meter plugin coil, blue ring
Kit of 5 coils as above

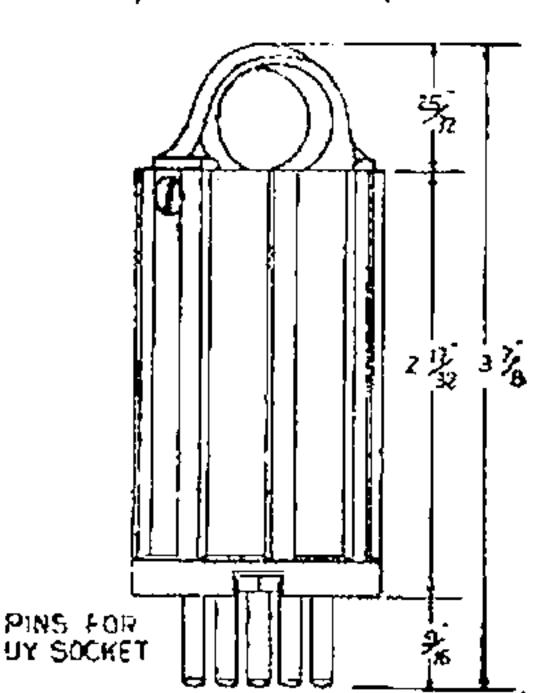
Bakelite tube with handle and pins

—No. 180—Code YAYOS—
—No. 181—Code YEANK—
—No. 183—Code YEDYG—
—No. 184—Code YICUI—
—No. 185—Code YUVUM—
—No. 185—Code YIDYL

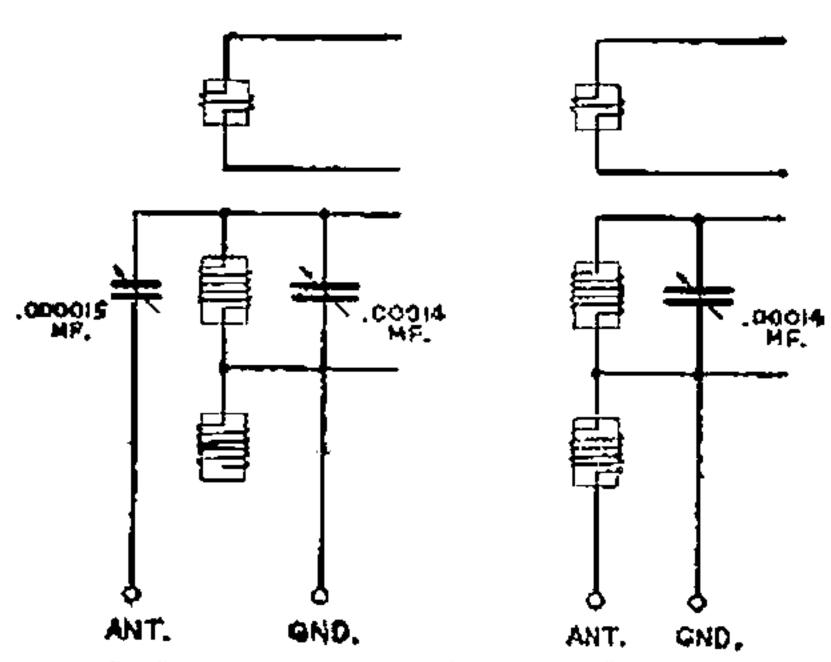
HERE is the new conception of plugin coils for short wave receiving—and as new in results as in appearance. Built to meet the requirements of A.R.R.L. short wave experts, they make obsolete the old clumsy, flimsy designs. No more spread-out sets with long, high-capacity leads, for the Pilot plugins take up no more room than a vacuum tube. In fact, any UX-227 type socket, such as the PILOT No. 211, 212, 215 or 217 can be used as the mokes for the plugin coils.



The wavelengths given above are for the coils when connected with antenna coupling to the grid, and in the circuit shown on page 2 of this Data Sheet. Generally, grid coupling is preferred, although inductive coupling is provided. The former has the advantage that any broadcast antenna can be employed. A Pilot J-5 condenser, of special construction to give a low minimum capacity, is used for coupling to the grid.



One-half size drawing



Left, connections for coupling to grid.
Right, connections for inductive coupling