

# INSTRUCTIONS— FOR INSTALLING AND OPERATING

This Five Tube Receiving Set is an engineered product, well designed and thoroughly tested before leaving our factory. No technical knowledge is required for its successful operation and installation and if instructions are carefully followed, good results are assured.

## How to Connect the Receiving Set

The set should be placed permanently on a table, and the batteries stood either back of the set or beneath the table. The connections should be made as per diagram below.

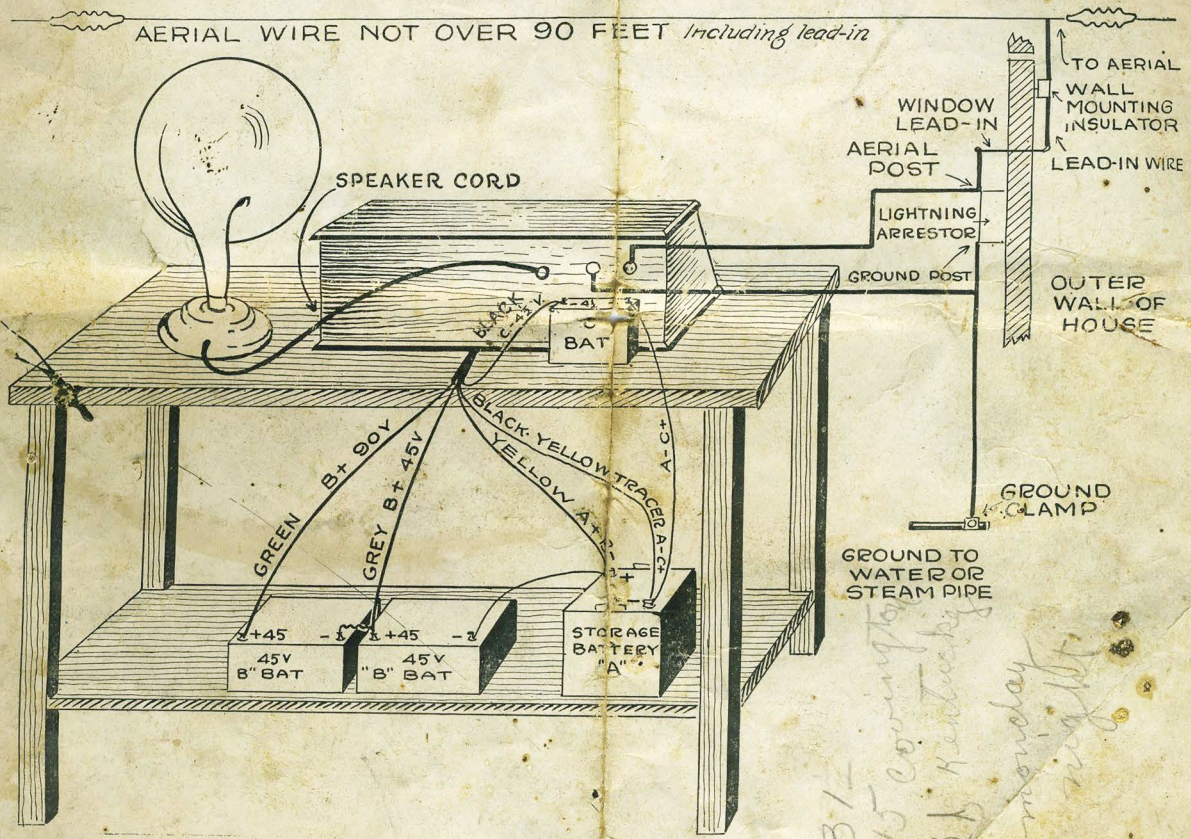


Diagram No. 1

**NOTE**—Scrape wires bare where connections are made to binding posts, batteries, lightning arrestors and ground clamp.

2. Where two wires connect to the same binding posts, see that both wires make good contact to the post.
- Two extra pieces of wire are included for making connections from A+ to B— and from A— to C+.

30  
MCM

3/15  
15 Cowington  
26 Kentucky  
Monday  
night



## HOW TO OPERATE THE FIVE TUBE RECEIVING SET

After you have made all connections as per sketch on previous page, turn switch to "on" position. Turn "volume" and "sensitivity" knobs towards the right about half way and insert 1 tube in the base panel marked "audio amplifier." (See Diagram No. 2 shown on next page.) If tube lights you are safe to insert the other 4 tubes. Caution: If tube does not light, carefully go over all connections, refer to diagram again and be sure the proper wires are connected to the batteries.

When inserting vacuum tubes into base panel you will note that each socket has 4 holes, with an arrow indicated at each socket. (See Diagram No. 2.) The base of each vacuum tube has a pin projecting on one side. This pin should be directly in line with this arrow. The tube is then pressed down gently into the 4 small holes all the way.

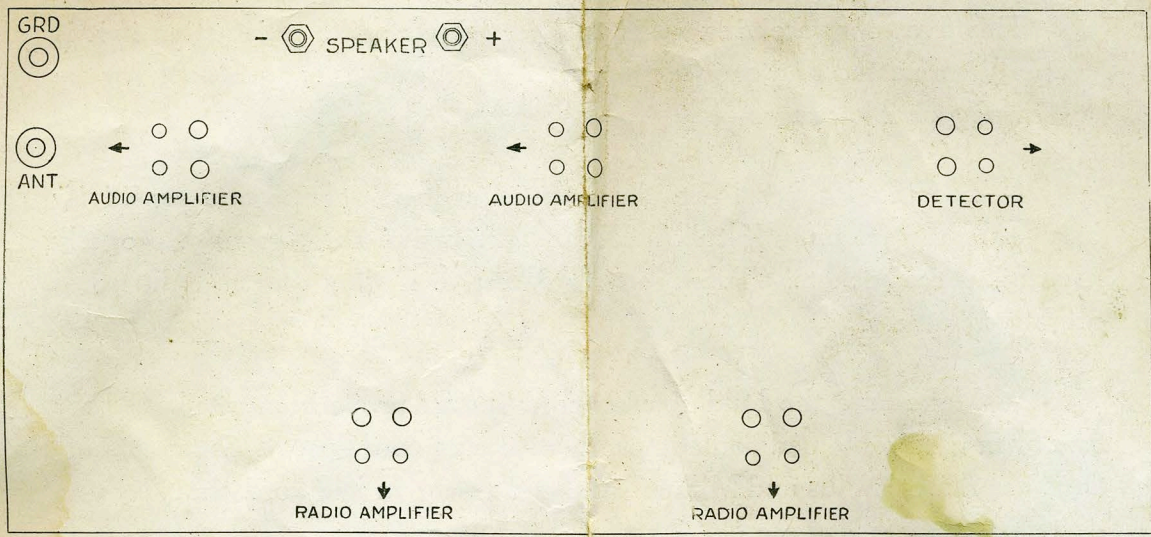
Rotate both "Sensitivity" and "Volume" knobs clockwise (about three-fourths of the way. A slight hiss will be heard in the loud speaker. You are now prepared to tune in a station within your receiving range that may be broadcasting at the time.

First—Set all three dials to "O" Then begin rotating the 3 dials very slowly and together a few scale divisions at a time keeping the readings on all three approximately alike. When a station is heard, adjust each dial individually with great care to the point where maximum volume is obtainable. Adjust the Volume knob to the lowest value consistent with clarity. If this knob is set too far in advance, set may squeal and station cannot be heard. In this case, turn volume knob slightly to the left until the desired station is loud and clear. Caution—Do not advance "sensitivity" and "volume" knobs beyond the point where satisfactory clarity and volume is obtained.

For other stations, repeat the above procedure, making a record of the dial setting for future reference. Once recorded, a station may be heard at the same dial setting whenever it is broadcasting and when atmospheric conditions are favorable.

When through using the set, turn the center switch to "off" position. Nothing else need be disconnected.





Base Panel—Diagram No. 2

In Diagram No. 2 it will be noted that there are 5 openings each designated by 4 holes and an arrow, for the insertion of 5 tubes. You may use all Type 201A, 301A, or tubes of similar characteristics.

In the socket marked "Detector" you may use the new Type 200A, Type 300A, or a similar tube of the same characteristics if desired. This type of tube while a little more costly in price, is well worth the difference. It has greater sensitivity than the ordinary type of detector tube and is especially effective on weak or distant signals.

If a power tube is used, Type 171 or 112, insert in first audio amplifier as shown in Diagram No. 2. When a Type 171 is used you must replace the 4½ volt C battery with a 22½ volt battery. Also another 45 volt B battery should be used, attaching the green wire marked B+ 90 volts, to the additional +45 volt battery, and connect a wire from Neg. (—) B to +45 of preceding "B" battery.

### Care of Storage Battery

A storage battery requires periodic recharging at intervals depending upon how much it is used. A 100 ampere battery will approximately give 60 hours of service before recharging is necessary. For example if you use your set 2 hours each day, the battery will require recharging every 30 days. You can purchase a battery charger or send the battery out to your local auto or electrical station.



This five tube receiving set is sure to give complete satisfaction if it is properly connected and carefully operated. If it fails to operate, look for the following possible causes—

1—See if all tubes light when center switch, volume and sensitivity knobs are turned on. If tubes do not light, make sure they are properly inserted in the sockets. Tubes are not defective if they do not light up as brightly as others.

2—Make sure the loud speaker cord tips are properly inserted. Clearer results may be obtained sometimes, by reversing cord tips. Speaker connections are marked Plus and Minus. The red tracer in the cord should go to + (Plus). See Diagram No. 2.

3—Check over all wires leading to the batteries and see that they are fastened securely to the proper post. Special attention is called to the Plus + and Minus — signs on the terminal posts. See that the proper wires are connected to them.

4—Make sure that the ends of wires connected to the terminal posts do not touch adjacent wires or posts.

5—Make sure the "C" Battery is properly connected.

6—Make sure your lightning arrester is not short circuited.

7—If set should begin to howl continuously move loud speaker away or place on opposite side of set. Some times the speaker is too close to the set. Changing tubes in different sockets will also eliminate this howl at times.

4/450  
112