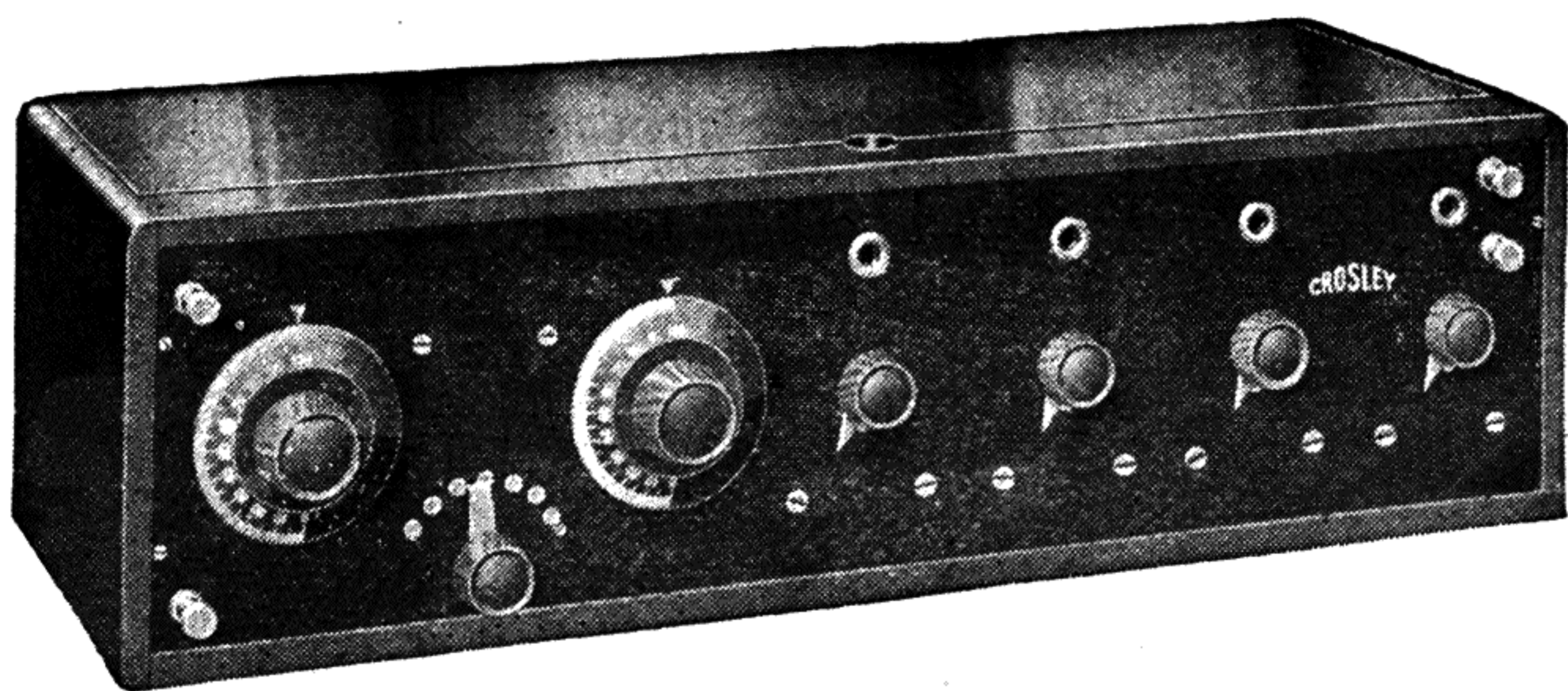


Instructions for Operating The Crosley Model "X" Receiving Set.



The Crosley Model "X" Radio Set consists of a single circuit tuner with a range of 175 to 600 meters wave length, one step of tuned radio frequency amplification, a detector unit, and two stages of audio frequency amplification. The necessary Binding Posts will be found back of the panel of the radio set. The parts on the front of the panel are as follows: The large dial at the left controls the antenna condenser, which is used for tuning in the Broadcasting Station. The tap switch just to the right of it, controls the antenna inductance, or the amount of coil that is used for hearing a station. This also is used in conjunction with the condenser when tuning in a station. The second dial tunes the radio frequency transformer. This of course has to be adjusted for the particular station you intend receiving. The small knobs below the peep holes to the right of the panel are the rheostat controls for the vacuum tubes that are used in this set.

In order to operate the set, it is necessary to have the antenna and ground leads connected to it. The antenna lead should be connected to the Binding Post on the upper left side of the panel marked "A" and the ground lead to the other post, marked "E," along side it.

A six-volt 80 to 100 ampere hour storage battery should be connected to the Binding Posts marked "A+" and "A—" on the small Binding Post Panel. The "A+" Post should be connected to the terminal in the storage battery which is marked plus or in some cases is painted red. The other Binding Post marked "A—" should be connected to the post on the storage battery with a minus mark on it, or to the post that is not painted or painted black. A 45-volt wet or dry "B" Battery should be connected to the Binding Posts on the sub-panel. The negative end, or black wire of the "B" Battery should be connected to the "B" Binding Post, and the middle connection of the 45-volt Battery should be connected to the "B 22+" post and the red wire, or full 45 volts of the 45-volt storage battery should be connected to "B 45+." After these connections have been made they should be very carefully checked over before placing any vacuum tubes in the instrument to make sure that the connections are correct. In case the 45-volt battery should be connected where the 6-volt Battery should be, the vacuum tubes will be burned out. The "A" Battery connections should be of fairly heavy wire and should be made very solid, as they have a large current to carry.

The telephone head set or loud speaker should be connected to the Binding Post marked "Phones" on the upper right end of the panel. For use as a loud speaker, we recommend the Baldwin Type "C" Receiver in our Magfon.

After again checking the connections of the Model "X" it is ready to operate. Turn the rheostats in a clock-wise direction until the tubes are lighted about as brightly as an electric lamp. Do not turn the rheostats up to a maximum however. The rheostat operating the detector tube should be set at the point just ahead of which a hissing noise is heard in the telephone receiver. The Amplifying tubes should not be burned quite so brightly as the detector tube. The brilliancy of the tubes can be observed by looking through the hole directly above the rheostat knob or by raising the lid of the cabinet and looking in.

Turn the tap switch to the proper tap for receiving the desired signals. This is the small switch found between the two dials and should be set on No. 2 or 3 from the left for amateur stations, No. 4 or 5 for Broadcasting Stations on about 360 meters and No. 6 or 7 for 485 or 600 meters. The radio frequency condenser should be moved back and forward slowly at the same time tuning the antenna condenser until the desired station is heard. As this instrument is not regenerative no extraneous noises will be heard until the music or voice is heard from the Broadcasting Station. However, as a small amount of coupling naturally is found in the vacuum tube, a set will sometimes start oscillating, and at such times the carrier beat frequency note or the whistle (as it is commonly known) will sometimes be heard. By tuning sharply the voice will become audible.

After the voice has been made audible, by tuning sharply and careful adjustment of the rheostat on the first and second tubes from the left, the signals can be increased considerably. A little practice will enable you to quickly tune in Broadcasting Stations or other signals to maximum volume. It will be found that the first two rheostats are most critical and the last two rheostats after having once been set for maximum volume will require no attention until the storage battery has begun to run down some. It will usually be found that better results will be obtained using more than 45 volts on the standard amplifier tubes as these tubes amplify much more when operated on a voltage from 90 to 120 volts. The Detector Tube will operate best on some voltage between 16 and 26 as Detector Tubes are very critical to the plate voltage that is applied to them. If you have a wet "B" Battery or storage "B" Battery you will readily be able to change the lead that goes to the "B 22+" until you are getting the best results.

The enclosed instructions for erecting the antenna will be found very useful to those who do not have an antenna erected as yet. We strongly recommend that you follow them closely so that you can obtain the best results.

A Radiotron UV 200, Cunningham C 300 or A. P. Detector Tube may be used in the second socket and Radiotron UV 201, Cunningham C 301 or A. P. Amplifier Tubes must be used in the other sockets.