



Phonola -
Electrohome 456

Used in -
Serenader & Phonola

Electrohome 456

Alignment Information

INTERMEDIATE FREQUENCY ADJUSTMENT

Set the signal generator for 456 k.c. Connect the antenna lead of the signal generator to the grid of the 1st detector through a .05 mfd. condenser. Turn the tuning condenser rotor until the plates are completely out. The ground lead from the signal generator goes to the ground lead of the receiver. The volume control should be at the maximum position. Reduce the signal so that A.V.C. action is not obtained.

Then adjust the four I.F. trimmer condensers until maximum output is obtained. The adjusting screws for the 1st and 2nd trimmer condensers are reached from the top or rear of the chassis. The openings of these trimmer condensers are covered over by small cover plates which are held in position by nuts. Loosen these nuts until the cover plates can be swung around. **CAUTION**—Use an insulated screw driver for adjusting trimmers to prevent short circuiting to ground.

BROADCAST BAND ADJUSTMENT

The broadcast short wave switch should be in the broadcast position. The antenna lead from the signal generator is in this instance connected to the antenna lead of the receiver. Reduce the signal so that A.V.C. action is not obtained.

Then set the signal generator for 1400 k.c. Turn the rotor until maximum output is obtained and set the pointer at the 1400 k.c. mark on the broadcast band scale. Then adjust the oscillator antenna and 1st detector broadcast trimmers until maximum output is obtained.

Next, set the signal generator for 600 k.c. and adjust the 600 k.c. trimmer. The adjusting screw is reached through a hole in the rear top of the chassis. Turn the tuning condenser rotor until maximum output is obtained. Then turn the rotor slowly back and forth over this setting at the same time adjusting the 600 k.c. trimmer screw until the highest output is obtained.

SHORT WAVE BAND ADJUSTMENT

In aligning the short wave band of the receiver, it will be noted that the signal will be heard with the signal generator set at two points 912 k.c. apart. That is, if the receiver is tuned to 15,000 k.c. a signal will be heard when the signal generator is set at 15,000 k.c. and again at approximately 15,912 k.c. This is due to image reception or the fact that a 456 k.c. is obtained when the signal is 456 k.c. lower than the receiver oscillator and also when the signal is 456 k.c. higher than the receiver oscillator. Care should be taken to see that the receiver is tracked with the signal generator adjusted to the lower of the two frequencies at which a signal is heard, in order that the oscillator in the receiver will be 456 k.c. higher in frequency than the signal.

Turn the broadcast short wave switch to the short wave position. As explained above, the volume control should be at the maximum position and the signal should be reduced to prevent A.V.C. action.

Next, set the signal generator for 15,000 k.c. The short wave trimmers are accessible from the bottom or under side of the chassis. Turn the rotor until maximum output is obtained. 15,000 k.c. should locate just inside the 19 meter band area. This is indicated by a coloured mark at the lower right hand side of the dial strip. After the signal is located, adjust the antenna trimmer, (first trimmer from the front of the receiver), while moving the rotor slowly back and forth over the setting until the highest output. If oscillation should occur at 15,000 k.c. or higher, increase slightly the oscillator trimmer capacity (trimmer farthest from the front of chassis). After any adjustment on the oscillator trimmer, re-adjust the antenna trimmer.

No adjustment is necessary at 6,000 k.c. However it is advisable to check the alignment at this point.