

INSTRUCTIONS FOR PHILCO 38-4

American short-wave stations are received during either the day or night; Far Eastern stations are heard in the early morning hours around daybreak.

The "Station List" included with these instructions will help you identify the various short-wave stations, by the dial number on which they are received. Many foreign stations announce in English at intervals, giving their call letters and location. Further information on Short-Wave Stations is available in various radio magazines, periodicals, and most daily newspapers.

Tone Control

There are four operating or "on" positions of the On-Off Switch and Tone Control knob: "Brilliant," "Bright," "Mellow," and "Deep." When the set is turned on, the Tone Control is automatically placed in the "Brilliant" position. This position is desirable for receiving standard broadcasts (particularly speech). The second position, "Bright," is obtained by turning the "On-Off Switch and Tone Control" one step further to the right. This position is for normal use in receiving standard musical programs. The next two positions, "Mellow" and "Deep," are best when tuning short-wave or distant stations, where a reduction of background noise is desirable; or on programs where bass emphasis is desirable.

SERVICE

For the convenience of all radio owners, Philco has developed a plan for prompt, efficient radio service in every locality. This plan is known as "Radio Manufacturers Service." There is a member in your neighborhood—his shop or store can be identified by the emblem shown here. To make sure of guaranteed work, genuine Philco tubes and parts, and standard prices—call a member of Radio Manufacturers Service.



WARRANTY

We warrant each new Philco Radio Receiver and Speaker to be free from defects in material and workmanship under normal use and service, our obligation under this warranty being limited to making good at our depot any part or parts thereof which shall within ninety (90) days after delivery of such Receiver to the original retail purchaser, be returned to our depot with transportation charges prepaid, and which our examination shall disclose to our satisfaction to have been thus defective; this warranty being expressly in lieu of all other warranties expressed or implied, and of all other obligations or liabilities on our part, and we neither assume nor authorize any representative or other person to assume for us any other liability in connection with the sale of Receivers or Speakers.

This warranty shall not apply to any Receiver or Speaker which shall have been repaired or altered other than by us in any way so as, in our judgment, to affect its stability or reliability, nor which has been subject to misuse, negligence or accident, nor which has had the serial number altered, effaced or removed. Neither shall this warranty apply to any Receiver or Speaker which has been connected otherwise than in accordance with the instructions furnished by us.

INSTRUCTIONS FOR

PHILCO 38-4

A MUSICAL INSTRUMENT OF QUALITY



AMERICAN AND FOREIGN BROADCAST RECEIVER



With Cone-Centric Automatic Tuning

DESCRIPTION

Philco Model 38-4 is a superheterodyne receiver for operation on alternating current (AC) using Philco High-Efficiency self-centering glass tubes. It is designed to receive standard American broadcasts, and American and Foreign short-wave broadcasts from 5.7 to 18.0 megacycles (5,700 to 18,000 kilocycles).

This model is equipped with the new Philco Cone-Centric Automatic Tuning—enabling you to select any of the popular nearby stations—and receive it, perfectly tuned automatically—in an instant's time.

To get the full performance that is built into this receiver, please read and follow these instructions as carefully as possible.

INSTALLATION

Aerial and Ground

To enable you to get the full performance your set was designed to give, Philco engineers have perfected a scientifically designed aerial known as the Philco High-Efficiency Aerial. This aerial gives high-efficiency response on both tuning ranges of this receiver.

Furthermore, Model 38-4 has built into it the Philco Foreign Tuning System, which means that whether you are listening to standard or short-wave broadcasts, the aerial and receiver are always automatically tuned together for maximum efficiency. This Tuning System is effective only when the Philco High-Efficiency Aerial is used.

Another feature of the Philco High-Efficiency Aerial is that it greatly reduces noise caused by electrical appliances and equipment in the vicinity. The noise reduction feature is also effective on both tuning ranges.

A terminal panel is provided at the rear of the chassis for connecting the aerial. This panel contains three screw terminals, marked "RED", "BLK," and "GND." When using the Philco High-Efficiency Aerial, connect the red and black terminals of the aerial "transmission line" (lead-in) to terminals "RED" and "BLK" respectively.

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If you use a temporary aerial connect it to the "RED" terminal.

A good ground connection is necessary for best foreign reception. With the Philco High-Efficiency Aerial, a ground lead and ground clamp are provided. Make the ground connection from the nearest water or radiator pipe to the terminal marked "GND" on the terminal panel.

Other Preliminaries

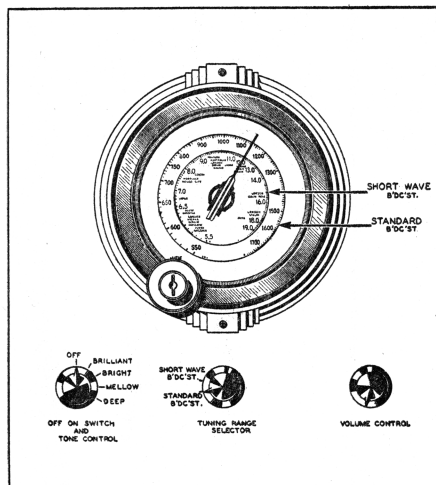
Locate the radio at a suitable place in the room, with due consideration to convenience of operation, appearance, tone, and handy connection to the aerial and an electric supply outlet. For best tone, the back of the set should be a short distance from the wall.

Your Philco dealer when he installs the set, will attach the tuning and other control knobs, and see that the Cone-Centric Automatic Tuning is properly set up and adjusted.

Insert the electric plug into the nearest electric supply outlet. Be sure your power supply is of the correct voltage and frequency (cycles), as specified on the receiver name label inside of the cabinet.

OPERATING

Observe the illustration carefully, noting the positions of the several controls. Turn the "On-Off Switch and Tone Control" one step or notch to the right (clockwise). This turns on the power and illuminates the dial. In a few moments the tubes will be sufficiently heated and the set ready to operate. Turn the Volume Control knob clockwise about half its range, and set the Tuning Range knobs in the left hand position.



Tuning

Tuning is accomplished by moving the knurled tuning knob around the outer circumference of the dial, causing the pointer or "station finder" to move over the scales. This new method enables you to locate any desired station with maximum ease and speed.

There are three positions of the tuning knob: "Out," "In," and "Intermediate."

The "Intermediate" position is for manual tuning—standard and short-wave. The other two

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positions are for use in Automatic Tuning, as is explained later.

"Vernier" or fine tuning is accomplished by pressing in and revolving the large flat knob underneath the knurled tuning knob.

Automatic Tuning

A number of stations—those most popular in your locality—are marked on the special local dial, which is available through your local dealer.

To select any of these marked stations, pull the tuning knob to the "Out" position, move it until the pointer points at the desired station, then push the knob "In." It is not necessary that it be pointed *exactly* at the station. Automatic tuning assures the *correct* tuning position being obtained if the operator secures the *approximate* position. If the pointer is pointed *too far* off the station, the set will remain silent when the knob is pushed "In."

Tuning Other Standard Broadcasts

The tuning knob must always be in the "Intermediate" position for manual broadcast tuning.

To select a desired station simply move the tuning knob until the hand points at the frequency (kilocycles) number of the station desired.

The frequencies of many American standard broadcast stations are listed on the Station List card furnished with this receiver.

For best tone, always tune the station in accurately with the volume low, then increase the volume as desired with the Volume Control Knob.

Silent Tuning

The "Out" position of the knob is for "silent tuning" between stations. In addition to using it as explained previously (when selecting a marked station by Cone-Centric Automatic Tuning), you can change from one station to another "silently" if desired. Simply pull the knob "Out", turn it until the hand points at the frequency of the station wanted, then press the knob in to the Intermediate position.

Short-Wave Reception

Turn the Tuning Range Selector knob to the right.

It is important to remember that due to the nature of short-wave signals, certain frequencies are heard best at certain times of the day (or night). Short-wave stations are received mainly on certain definite sections of the dial, these sections being indicated by a heavy line below the scale divisions. The following schedule will tell you what time of day to tune the various sections or bands:

MORNING—17.7-18.0;15.0-15.5; 11.7-12.0

AFTERNOON—11.7-12.0;9.5-10.8

EVENING—9.5-10.8;5.7-6.8

The figures used represent megacycles. A megacycle is 1,000 kilocycles (KC). Megacycles are used instead of KC in designating short-wave stations, to avoid using long numbers with many zeros.

Tune carefully (using the "slow-speed" or large knob) over the proper portion of the dial (depending on the time of day. When you pick up a station, carefully adjust to *exactly* the best point. Finally regulate the volume control as necessary for best reception.