INSTRUCTIONS FOR
PHILCO TELEVISION RECEIVER
MODEL 49-1040

Philco Television Receiver Model 49-1040 is a twenty-four tube superheterodyne receiver, designed to receive television picture-and-sound broadcasts. The receiver incorporates the latest advances in electronic science.

The *Philco Precision Channel Selector* provides for easy selection of any of the television channels assigned to any area in which the receiver may be used. *Automatic Tuning with Electronic Control* keeps a constant check on the receiver tuning, instantly making any necessary tuning adjustments automatically. *Automatic Level Control of Picture and Sound* compensates for signal variations, to prevent fading and fluctuations in the picture and sound. This feature controls the received signal so effectively that operation of the receiver has been greatly simplified. These developments, combined with precision construction, make this receiver exceptionally trouble-free and easy to operate.

Provision is also made for attachment of the new Philco Album-Length Record Player, Model M-15. This new type of record player permits the use of the sound section of the television receiver as a phonograph for the playing of the New Columbia Long Playing "Microgroove" Records. This combination provides startling new purity and fidelity of tone in record reproduction. Complete installation instructions are furnished with the record player.

The receiver operates only on 60-cycle, 110 to 120-volt, alternating current. Do not attempt to operate the receiver from any other type of power source. Do not remove the protective cover from the back of the receiver, or attempt any repairs or adjustments. Should service ever be required, call your Philco Television Dealer.

INSTALLATION

The receiver will be installed by your Philco Television Dealer or by his Philco Television Serviceman. He will be of help in choosing the most satisfactory location for the receiver. The television picture can be viewed comfortably by most people at a distance between five and fifteen feet from the front of the receiver; a space of about five feet by fifteen feet should be available directly in front of the receiver if the television program will frequently be viewed by more than three or four persons. The room need not be in total darkness when viewing a television program, but for best results the room lighting should not be too bright. The television receiver should be placed so that direct light from windows or from lamps does not fall on the picture screen, or glare in the eyes of the viewers. At the time the installation is made, consideration should be given to provisions for an alternate location in the room, in case it is desired to move the receiver at a later date.

The proper aerial, correctly installed, is very important in the reception of television programs. Fuzzy, distorted, streaked, or jittery pictures can result from a poor aerial installation. Since all television receiving aerials are directional, and since this property of the aerial is used to eliminate unwanted reflected signals, which cause "ghosts" (double images) on the screen, the aerial must be carefully oriented (directed) when it is installed. The Philco Television Aerial, which is specially designed for use with Philco Television Receivers, will be installed by your Philco Television Dealer as a part of the general installation.
**RECEIVER-LOCATION CONSIDERATIONS**

1. Philco Television Receiver.
2. Readily cleared area in front of receiver.
3. Windows far enough from receiver so daylight cannot fall directly on picture screen. Windows easily shaded if necessary to darken room.
4. Lamps so placed that they cannot cause glare on picture screen.
5. Possible alternate location for receiver.

In the majority of installations, one television aerial is sufficient for reception of television programs on all channels. However, in some localities, because of the locations of the stations or the frequency difference between the stations, the television-station signals on some channels may not be satisfactory; in this case additional aerials may be necessary to obtain satisfactory reception on all channels. The additional aerials can be very easily attached to the same mounting mast used in the original aerial installation.
OPERATION

TO OPERATE THE RECEIVER FOR THE FIRST TIME, or if the controls have been disturbed since the receiver was last used, perform the seven steps listed below:

1. Turn the BRIGHTNESS and CONTRAST controls fully to the left.

2. Turn the CHANNEL SELECTOR to the channel number of the desired station. Automatic Tuning with Electronic Control will complete the tuning operation.

3. Turn the OFF-ON-VOLUME control to the right until a click is heard. Wait about one minute for the tubes to warm up, then adjust for the desired volume.

4. Turn the BRIGHTNESS control to the right until the picture tube is just barely illuminated.

5. Turn the CONTRAST control slowly to the right until movement or a pattern is visible on the screen.

6. Turn the VERTICAL control to stop any up or down movement, and turn the HORIZONTAL control to stop any sideways movement.

7. Readjust the CONTRAST and BRIGHTNESS controls until the picture has a pleasing range of shades of gray, from intense black to clear white.
The receiver is now adjusted for the average user. Further adjustments may be made to suit individual preferences.

The sound portion of the television program is adjusted by the use of the VOLUME control, while the picture portion is adjusted by the use of the BRIGHTNESS, CONTRAST, VERTICAL, and HORIZONTAL controls. Rotating the BRIGHTNESS control to the right increases the over-all brightness of the picture. When the general illumination in the room is high, the BRIGHTNESS control should be adjusted for a brighter picture than it is when the general illumination is low. Too low a setting of the BRIGHTNESS control produces a dark and dingy picture, while too high a setting causes the picture to appear "thin," or "washed out." Rotating the CONTRAST control to the right increases the brightness of the white portions of the picture relative to the over-all picture brightness; therefore, the CONTRAST control must be adjusted to correspond to the BRIGHTNESS setting. Too high or too low a setting of either control produces a poor picture. A little practice in attaining a good balance between the settings of the BRIGHTNESS and CONTRAST controls will enable the user to obtain quickly the type of picture presentation most pleasing to the individual.
The VERTICAL and HORIZONTAL controls, when once correctly set, should require only an occasional slight readjustment. The following illustrations indicate the effects requiring adjustment of these controls, and advise the correct procedure.

Turn VERTICAL control slowly to the right until normal picture is obtained.

Turn VERTICAL control slowly to the left until normal picture is obtained.

Turn HORIZONTAL control slowly to the right until normal picture is obtained.

Turn HORIZONTAL control slowly to the left until normal picture is obtained.
TO SELECT A DIFFERENT STATION, simply turn the CHANNEL SELECTOR to the desired channel number. Automatic Tuning with Electronic Control will make all minor tuning adjustments. If the station selected is abnormally strong or weak, it may be necessary to readjust the CONTRAST and BRIGHTNESS controls, as previously described, to obtain the type of picture presentation desired. Usually, however, the Automatic Level Control of Picture and Sound will make it unnecessary to readjust these controls.

TO TURN THE RECEIVER OFF, turn the OFF-ON-VOLUME control to the left until a click is heard.

TO OPERATE THE RECEIVER THEREAFTER, turn the receiver on and select the desired station. If the channel selected is different from the one last used, a slight readjustment of the CONTRAST and BRIGHTNESS controls may be necessary.

GENERAL INFORMATION FOR THE USER

TELEVISION CHANNELS

A total of twelve television broadcast channels have been assigned for television broadcasting, but not more than seven channels are assigned to any one area. This arrangement was made to prevent possible interference between stations on the same channels or on adjacent channels. Your Philco Television
Receiver has been adjusted to provide reception of all television stations in your area. Reliable reception of stations beyond this area cannot be obtained because of the nature of television signals. Consult your local newspaper for the broadcasting time and channel number of your local television broadcasting stations.

**FOCUS ADJUSTMENT**

After extended periods of time it may be found that correct adjustment of the regular operating controls on the front of the receiver will not produce a clear, sharp picture, and a slight readjustment of the FOCUS control may be necessary. This control is a screwdriver adjustment located on the rear of the television chassis, and is plainly marked. It should be carefully adjusted for a clear, sharp picture.

**CARE OF THE RECEIVER**

The receiver and its cabinet should be given the same care as any piece of fine furniture. The picture screen may be wiped with a soft cloth to remove dust and fingerprints. Do not subject the receiver to rough treatment. Do not place anything on or against the cabinet in such a way as to obstruct the ventilating openings in the rear of the cabinet. Do not attempt to clean inside the cabinet. Do not disturb any of the knobs or adjustment screws on the rear of the chassis, except as directed under FOCUS ADJUSTMENT. Never remove the protective cover from the back of the receiver.

**INTERFERENCE**

Your new Philco Television Receiver is provided with the latest electronic devices to insure trouble-free reception. In spite of this, certain types of interference may occasionally disturb the television picture.

Streaks of light which flash across the screen intermittently are often caused by automobile ignition, electric motors, and similar electrical appliances. Medical diathermy equipment sometimes causes a "herringbone" pattern of lines in the picture. Short-wave transmitters can cause a pattern of alternate light and dark vertical or slanting lines in the picture. Strong interfering signals may cause the picture to jump or drift on the screen. A double image, or "ghost," is the result of the arrival of the television signals at the receiver by multiple paths. (This can happen because television signals, like radar signals, are reflected, or bounced, from buildings, mountains, and similar objects.)

In most cases the interference will be found to occur only occasionally, and may not prove too troublesome. In some cases the interference can be reduced or eliminated by changes at the aerial. If the interference persists, consult your Philco Television Dealer.
Ignition Interference

Diathermy Interference

Ghosts

Short-Wave Interference
YOUR GUARANTY FROM PHILCO

Your new Philco Television Receiver is a high-quality instrument. It has been built with care and skill and is designed to bring you years of pleasure and satisfaction.

Your Philco Television Receiver is guaranteed under the terms of the Standard Warranty below. But beyond this, Philco maintains an extensive factory-trained service organization of its distributors, dealers and servicemen, which is constantly available to you as a Philco owner. It is an added value which comes to you with every Philco product.

Television Technicians who are qualified to service the Philco Television Receivers have been thoroughly trained by Philco factory engineers and service experts. They offer capable, reliable service at standard, reasonable labor charges; they guarantee their work, and they use genuine Philco replacement parts and tubes.

Thus, the entire engineering and service resources of Philco seek to insure your long-continued satisfaction.

STANDARD WARRANTY

"We warrant each new Philco Television Receiver to be free from defects in material and workmanship under normal use and service, our obligation under this warranty being limited to making good any part or parts thereof which shall, within one (1) year after delivery of such set to the original retail purchaser, be returned to us through our distributor or dealer 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 our products.

"This warranty shall not apply to any set which shall have been repaired or altered 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 set which has been connected otherwise than in accordance with the instructions furnished by us."

PHILCO CORPORATION
PHILADELPHIA