

• INSTRUCTIONS •

PHILCO

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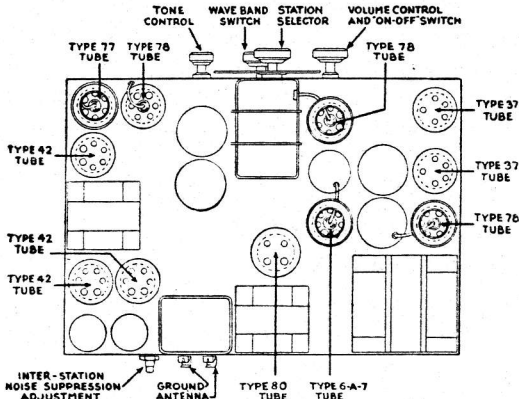
BALANCED-UNIT RADIO

Model 17-B

The Model 17 is a complete A. C. electric screen grid superheterodyne receiver combining standard broadcast, aircraft and police broadcast reception. The frequency range of the receiver is 520 to 4,000 kilocycles, and the selection of the type of broadcast is accomplished by a switch grouped with the other receiver controls on the front panel.

The Receiver is shipped with the tubes installed in their respective sockets. Before placing the receiver in operation, be sure that the packing material around the tubes is removed, and that the radio chassis hold-down bolts are loosened. Before inserting the attachment plug of the Receiver in the A. C. line outlet, see that all the tubes are properly seated in their sockets. The terminals of the five wires must be connected to the terminals on the top of the screen grid tubes. The tube shields must be in place over the tubes as shown in Fig. 1. Connect only to a source of alternating current within the limits of voltage and frequency (cycles) as listed in the license notice on the radio chassis.

Eleven Philco high-efficiency tubes are supplied. They are:



3—Philco Type 78 Super Control Tubes

1—Philco Type 6A7 Detector—Oscillator Tube

2—Philco Type 37 Tubes

1—Philco Type 77 Screen Grid Tube

3—Philco Type 42 Pentode Power Amplifier Tubes

1—Philco Type 80 Rectifier Tube

FIG. 1

USE ONLY PHILCO TUBES IN THIS RECEIVER FOR 100 PER CENT. BALANCED-UNIT PERFORMANCE

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AERIAL—An outdoor aerial, consisting of a single copper wire 50 to 100 feet long, usually gives the best results. The lead-in wire, unless shielded, is considered an active part of the aerial. The outer end of the aerial should be as high as possible and the entire aerial should be spaced well away from trees and buildings and supported by glass or porcelain insulators. The Philco Three-Purpose Complete Antenna System is highly recommended.

GROUND—A suitable ground clamp and wire must be securely attached to a water radiator pipe or water pipe and the bare wire end connected to the "GND" terminal of the Receiver.

TUNING THE RECEIVER—A knurled adjusting screw (see Fig. 1), on the left rear, facing back of Receiver, controls the automatic inter-station noise suppression feature. This adjusting screw should be turned in a counter-clockwise direction until the best average reception is obtained, with a minimum of inter-station background noise for the particular location in which the Receiver is operated. The switch on the right side of cabinet should be in DOWN position when the above adjustment is made. It is sometimes desirable, when tuning in distant stations, temporarily to disconnect the inter-station noise suppression feature. This is done by placing the switch (on side of cabinet) in UP position.

NEVER ATTEMPT TO REGULATE ANY OF THE OTHER ADJUSTING SCREWS, AS THIS MAY CAUSE THE RECEIVER TO OPERATE IN AN UNSATISFACTORY MANNER.

OPERATING THE RECEIVER—BROADCAST—After all connections have been made, turn the combination "On-Off" switch and volume control clockwise about one-half the total range of movement. Turn the frequency (wave-band) selector to the left. After the tubes heat (approximately thirty seconds), turn the station selector to the frequency at which the desired station will be received. Adjust the station selector to the point at which a station is received most clearly. Shadow tuning is invaluable in accurately tuning the Receiver. The volume control always should be used for reduction or increase in the signal

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strength. DO NOT de-tune the Receiver in an effort to decrease volume. De-tuning will spoil the tone quality.

OPERATING THE RECEIVER—AIRCRAFT AND POLICE—Turn the frequency (wave-band) switch to the right, following the procedure above.

AUTOMATIC VOLUME CONTROL—The automatic volume control incorporated in this Receiver tends to equalize the volume of all stations at the sound level for which the manual control has been set. This prevents the blaring of strong stations during tuning and reduces the fading of distant stations. With the volume control in a given position, the reproduction will not vary greatly in volume, even if the tuning is changed from a weak station to a strong one, or *vice versa*.

BASS-COMPENSATING TONE CONTROL—With this exclusive Philco development, tone control takes on new meaning and has greater usefulness. Instead of cutting the reproduction of treble or high tones, this improved system brings up the proportion of bass or low tones as the tone control is advanced. This gives a pleasing depth and mellowness of tone combined with the desirable crispness and clarity which only the correct balance of unmodified high tones can give. Furthermore, the speaker may be turned up to tremendous volume without offending the ears.

The bass-compensating circuit is tied in with the manual volume control, as well as with the tone control, in such manner that the proportion of low tones increases as the volume control is turned in the direction to reduce volume. This compensates for the well-known insensitiveness of the human ear to low tones at low volume, and gives more faithful and pleasing reproduction at the volume levels generally used in the home.

The tone control has four points or settings, as before, but the use of these four points is somewhat different, as will be explained.

POINT 1 (Brilliant)—No bass compensation. This setting must be used when receiving local stations which have a characteristic rumble or low-pitched carrier hum. The exceptional, high-quality reproduction afforded by Philco bass compensation cannot be enjoyed when receiving certain stations in a few localities, due to the objectionable amount of rumble or hum in their transmission, and this tone-control point is needed to receive such stations, especially on speech programs.

POINT 2 (Bright)—Moderate bass compensation. This setting gives most faithful reproduction on very strong local stations.

POINT 3 (Mellow)—Full bass compensation. This setting should be used for best tone reproduction on most local stations and all distant stations, where the greater faithfulness of low-tone reproduction does not bring in an objectionable station rumble.

POINT 4 (Deep)—Full bass compensation plus a reduction in high-tone response. This setting may be used on distant stations where the static or background noise must be modified in order to enjoy the program. This setting may also be used to reduce excessive needle scratch on phonograph record reproduction.

NOTE that unless the program you are listening to has bass music in it, you will notice no difference in tone between points 1, 2 and 3 of the tone control, since the bass compensation naturally cannot bring out low tones unless they exist in the broadcast program. Neither will there be much difference between points 1, 2 and 3 on distant station programs. On strong local and semi-distant station programs, however, either point 2 or point 3 will be found to give the most faithful and pleasing reproduction of orchestra, band, organ, piano, male voice and other programs which cover the bass as well as the treble register.

SERVICE—Should your Philco require service, call an authorized Philco Service Station or a representative of **RADIO MANUFACTURERS SERVICE** (a Philco Service Plan), one of whom is to be found near you.

RADIO MANUFACTURERS SERVICE members have been selected for their technical ability and business integrity. For guaranteed radio service, call an R. M. S. member. The use of *genuine* Philco Parts and Tubes is necessary to obtain original quality of performance.

STANDARD WARRANTY

We warrant each new Radio Receiver and Speaker manufactured by us 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 factory or factory depot any part or parts thereof which shall, within ninety (90) days after delivery of such Receiver to the original purchaser, be returned to us 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 Receivers or Speakers.

This warranty shall not apply to any Receiver or Speaker which shall have been repaired or altered outside of our factory or factory depots 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.

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PHILADELPHIA—TORONTO—LONDON

PHILCO STATION LOG

hilo scale mbers	STATIONS	Alph- betical List	Scale	LOCATION	Alph- betical List	Scale	LOCATION
55	WGR	KDKA	98	E. Pittsburgh, Pa.	WDAE	122	Tampa, Fla.
	WFL-WLIT	KDYL	129	Salt Lake City, Utah	WDBO	112	Orlando, Fla.
	WWNC-WNAX	KECA	143	Los Angeles, Calif.	WDGY	118	Minneapolis, Minn.
	KSAC	KFAB	77	Lincoln, Neb.	WDOO	128	Chattanooga, Tenn.
0	KHJ-KWOW	KFI	64	Los Angeles, Calif.	WEAF	66	New York, N. Y.
	KFSO	KFKB	105	Milford, Kans.	WENR	87	Chicago, Ill.
	WIP-KFRC	KFKU	122	Lawrence, Kans.	WFAA	80	Grapevine, Texas
	KGW-WTMJ	KFKX	102	Chicago, Ill.	WFI	56	Philadelphia Pa.
	WOS	KFMX	125	Northfield, Minn.	WGN	72	Elgin, Ill.
	KFI-WOI	KFRC	61	San Francisco, Calif.	WGR	75	Amherst, N. Y.
	WSM	KFSO	60	San Diego, Calif.	WGY	59	Schenectady, N. Y.
	WEAP	KGA	147	Spokane, Wash.	WHAM	115	Rochester, N. Y.
	WMAQ	KGMB	132	Honolulu, T. H.	WHAS	82	Jeffersontown, Ky.
	WPTF-KPO	KGO	79	Oakland, Calif.	WHK	139	Cleveland, Ohio
	CANADA	KGRS	141	Amarillo, Texas	WHO	100	Des Moines, Iowa
	WLW	KGU	94	Honolulu, H. I.	WIOD	130	Miami Beach, Fla.
	WOR	KGW	62	Portland, Ore.	WIP	61	Philadelphia, Pa.
	WGN-WLIB	KHJ	90	Los Angeles, Calif.	WIS	101	Columbia, S. C.
	CANADA	KHO	59	Spokane, Wash.	WJAS	129	Pittsburgh, Pa.
	WBR-KMMJ	KIDO	125	Boise, Idaho	WJJD	113	Mooseheart, Ill.
75	WJR	KMBC	95	Independence, Mo.	WJR	75	Detroit, Mich.
	WJZ-KVI	KMMJ	74	Clay Center, Neb.	WJSV	146	Mt. Vernon Hills, Va.
	WBBM-KFAB	KMOX	109	St. Louis, Mo.	WJZ	76	New York, N. Y.
	WMC	KNOX	105	Hollywood, Calif.	WKAQ	89	San Juan, Porto Rico
	WGO-WGY	KOA	83	Denver, Colo.	WKBH	138	La Crosse, Wis.
80	WBAP-WFAA	KOB	118	State College, N. M.	WKBW	148	Amherst, N. Y.
	WCCO	KOIL	126	Council Bluffs, Iowa	WKY	90	Oklahoma City, Okla.
	WGLS	KOIN	94	Portland, Ore.	WLAC	147	Nashville, Tenn.
	KOA-WRUF	KOMO	92	Seattle, Wash.	WLBI	72	Chicago, Ill.
	CANADA	KPO	68	San Francisco, Calif.	WLIT	56	Philadelphia, Pa.
35	KWKH-WWL	KSAC	58	Manhattan, Kans.	WLS	87	Crete, Ill.
	WABC	KSJ	133	Sioux City, Iowa	WLW	70	Mason, Ohio
	WENR-WLS	KSL	113	Salt Lake City, Utah	WLWL	110	New York, N. Y.
	CANADA	KSOO	111	Sioux Falls, S. D.	WMBF	130	Miami Beach, Fla.
	WKAQ	KSTP	146	Wescott, Minn.	WMC	67	Memphis, Tenn.
	WKY-KHJ	KTBS	145	Shreveport, La.	WMAQ	78	Chicago, Ill.
	CANADA	KTHS	104	Hot Springs, Ark.	WNAC	123	Boston, Mass.
	WWJ-KOMO	KTNT	117	Muscatine, Iowa	WNAX	57	Yankton, S. D.
	WBRC	KUOA	139	Fayetteville, Ark.	WOAI	119	San Antonio, Texas
	KOIN-KGU	KVI	76	Tacoma, Wash.	WOC	100	Davenport, Iowa
	KMBC-WRC	KVOO	114	Tulsa, Okla.	WOI	64	Ames, Iowa
	CANADA	KWK	135	St. Louis, Mo.	WOR	71	Newark, N. J.
	WCFE	KWKH	85	Shreveport, La.	WOS	63	Jefferson City, Mo.
	KDKA	KYA	123	San Francisco, Calif.	WOW	59	Omaha, Neb.
	WBZ-WBZA	KYW	102	Chicago, Ill.	WOWO	116	Fort Wayne, Ind.
	WHO-WOC	WABC	86	New York, N. Y.	WPG	111	Atlantic City, N. J.
	WIS	WACO	124	Waco, Texas	WPTF	68	Raleigh, N. C.
	KFKX-KYW	WADC	132	Tallmadge, Ohio	WRC	95	Washington, D. C.
	CANADA	WAPI	114	Birmingham, Ala.	WRUF	83	Gainesville, Fla.
	KTHS-WMAK	WBAL	106	Baltimore, Md.	WRVA	110	Richmond, Va.
05	KNX-KFKB	WBAP	80	Fort Worth, Texas	WSB	74	Atlanta, Ga.
	WBAL-WTIC	WBBM	77	Chicago, Ill.	WSM	65	Nashville, Tenn.
	WTAM	WBRC	93	Birmingham, Ala.	WTAM	107	Cleveland, Ohio
	WBT	WBT	108	Charlotte, N. C.	WTAQ	133	Twp. Washington, Wis.
	KMOX	WBZ	99	E. Springfield, Mass.	WTIC	106	Avon, Conn.
	WFL-WLWL	WBZM	128	Camden, N. J.	WTMJ	62	Brookfield, Wis.
	KSOO-WRVA	WCAU	117	Philadelphia, Pa.	WWJ	92	Detroit, Mich.
	WDBO	WCCO	81	Minneapolis, Minn.	WWL	85	New Orleans, La.
	WJJD-KSL	WCFL	97	Chicago, Ill.	WWNC	57	Asheville, N. C.
	KVOO-WAPI	WCKY	149	Covington, Ky.	WWVA	116	Wheeling, W. Va.
	WHAM	KREG			WXYZ	124	Detroit, Mich.
	WOWO-WVVA						
	KTNT-WCAU						
	WDGY-KOB						
	WOAI						
	WIL						
	WCBS						
	WDAE-KFKU						
	KYA-WNAC						
	WACO-WXYZ						
15	KGO-KFMX						
	KOIL						
	WJDX						
	WCAM-WDOD						
	KDYL-WJAS						
30	WIOD-WMBF						
	WTRC						
	WADC-KGMB						
	KSCI-WTAQ						
	WSPD						
35	KWK						
	WFBL						
	KMAC						
	WKBH						
	KUOA-WHK						
40	WBZ						
	KGRS						
	WEHS						
	KECA						
	WMBD						
5	KTBS						
	WJSV-KSTP						
	KGA-WLAC						
	WKBW-KFJF						
	WCKY						
0	KREG						