

1941 Radios Under \$30

The small radio remains, by and large, a poor musical instrument. Some makes are better than others; some sets better for one use than for another. Herewith ratings

DESPITE a consistent improvement in small radios during the last three years, the midget still remains (as it probably always will) a satisfactory receiver of news broadcasts and entertainment, and a poor musical instrument. But all radios selling under \$30 are not necessarily midgets. Some of them are table models of good proportions—the range running from midget midget through midget, large midget, small table, medium table and table sizes. And the larger models are capable of good musical reproduction.

As usual, the 1941 mail-order models have the edge on the standard brands in value per dollar, but not to the extent of previous years. In some cases, the difference is direct and considerable—notably in the case of many *Admiral* and *Knight* (Allied Radio, Chicago) models. These radios are both made by Continental Radio, *Admiral* being the

company's own trademark. *Admiral* radios may sell for about twice as much as the same models under the *Knight* name.

An unwarranted differential in price also exists between different models of the same make employing the same chassis (that is, the same working parts). With no more than a difference in cabinet, the price differential may run as high as 100%. Performance of the more expensive and the cheaper radios in such cases will be identical, unless the difference in cabinet size is sufficient to improve tone quality and sensitivity slightly.

In making its tests, CU has endeavored to secure the cheapest cabinet with each model tested. However, this has not always been possible, and where models having the same chassis are available at cheaper prices than those listed in the ratings, such radios are better buys. A reliable dealer can inform you concerning radios employing the same chassis. Unfortunately, many dealers are not sufficiently familiar with their wares to do so—while others prefer selling the more expensive models.

Many manufacturers designate a chassis by a letter or numeral or group such as 6D (*Zenith*), EC (*Emerson*), which remains the same for all models using that chassis—a varying additional number or group indicating the model.

The easiest way of checking up on different models employing the same chassis (unless the dealer can supply the information) is by inspecting the direction sheet accompanying any model. The direction sheet will usually be the same for all models employing the same chassis, and will designate the various models to which it applies.

Thirty-five receivers under \$30 were tested in the laboratory by CU, representing about twice that many models.

Practically all radios tested had built-in antenna of some sort—usually a loop—which was effective on an adequate number of stations (in most cases up to 150 miles distant). All radios had provision for the use of an external aerial, and many had ground posts—although all that did worked better without ground. Where provision was made for an external aerial, the majority of radios gave superior per-

formance with a ground connected in place of the aerial.

Where a ground post or wire is provided, shock hazard may be reduced somewhat by its use, though this is by no means a guarantee of safety. Most of the radios tested showed some shock hazard. Nor is the presence of a "UL" (Underwriters' Laboratory) label on the chassis or cabinet an indication that the radio is safe.

In the majority of cases, the shock hazard is slight. However, antenna and ground should never be connected unless the power plug is removed from the base receptacle. Where push-button adjustments are made with a metal screwdriver (the radio necessarily being "on" during this process), care should be observed to touch no grounded object—lighting fixture, radiator, &c.

"WHISTLES"—image-frequency interference—will be experienced to a greater or less degree on almost all inexpensive radios. Usually these will be heard mostly on the upper and lower portions of the dial, and as a rule can be tuned out sufficiently to permit good reception. Whistles are always worse on the high frequencies (short waves).

The presence of an extra tuning band does not necessarily mean much in the way of greater radio value for the dollar. Many 1941 radios are incorporating a limited second band—sometimes merely a police band from about 2.0 to 3.5 megacycles, or a "high-frequency" band up to 6.0 megacycles. Neither of these bands provides much in the way of entertainment. A short-wave band should cover the 9.6, 12.0 and 15.0 megacycle channels at least to contribute value to the radio. But even this extended band is relatively worthless unless the purchaser is interested in short-wave reception and unless the dial mechanism permits easy tuning of the higher frequencies (which is the exception).

Similarly, push-button tuning is hardly a feature if the push-buttons are difficult to set, stiff to work, do not tune accurately—or if the buyer is satisfied to tune with the conventional knob.

All in all, better radio value for standard broadcast band reception can be expected in a set that does not have short-wave bands or push-button tuning.

The principal factors to be considered in the purchase of a small radio are tone, volume, sensitivity and selectivity. To a certain extent, tone and volume go hand in hand—bringing up volume beyond a certain point will cause distortion in tone. If the radio is to be operated on a bedside stand, in a breakfast nook or some other small room, volume is not so important. For a large room it is a primary consideration.

Best Buys

(In descending order of merit based on both quality and price. See accompanying ratings, in order of quality only, for details of these models.)

- Crosley 24AU. \$29.95, list.
 Sears' Silvertone Cat. No.—1561. \$17.95 plus transportation.
 Echophone "Commercial" EC-1. \$19.95. Particularly for short-wave fans.
 Ward's Airline Cat. No.—612. \$17.88 plus transportation.
 RCA 16X2. \$19.95, list.
 Philco Transitone PT-44. \$18.95, list.
 Crosley 11-AH. \$17.95, list.
 Philco Transitone PT-25. \$9.95, list.
 Sears' Silvertone Cat. No.—3351. \$9.45 plus transportation.
 Ward's Airline Cat. No.—420. \$5.75 plus transportation.

In Order of Tone Quality

- Crosley 24AU. \$29.95, list.
 Lafayette C-117. 20.95.
 Emerson ED-354. 24.95, list.
 Emerson EH-342. 22.95, list.
 Sears' Silvertone Cat. No.—1561. 17.95.¹
 Crosley 21AQ. 25.95, list.
 Ward's Airline Cat. No.—612. 17.88.¹
 Knight Cat. No. B10550. 20.95.
 Philco 230-T. 32.50, list.
 Crosley 20AP. 19.95, list.
 Admiral 50-J6. 24.95, list.
 Echophone EC-1. 19.95.
 RCA 16X2. 19.95, list.
 Admiral 47-J55. 20.95, list.
 Philco PT-44. 18.95, list.
 Emerson DR-343. 19.95, list.
 Crosley 11-AH. 17.95, list.
 Admiral 51-K6. 24.95, list.
 Admiral 45-J5. 14.95, list.
 RCA Q20. 24.95, list.
 RCA 10X. 14.95, list.
 Philco PT-6. 19.95, list.
 Sears' Silvertone Cat. No.—3351. 9.45.¹
 Zenith 6D526. 24.95, list.
 Zenith 6D525. 19.95, list.
 RCA 45X-16. 17.95, list.
 Philco PT-25. 9.95, list.
 Knight Cat. No. B10531. 10.95.
 Lafayette S-165. 9.95.¹
 Emerson EP-301. 12.95, list.
 Admiral 12-B5. 15.95, list.
 Admiral 15-D5. 9.95, list.
 Emerson EC-301. 9.95, list.
 RCA 45X1. 9.95, list.
 Ward's Airline Cat. No.—420. 5.75.¹

¹ Plus transportation.

If you live within the local service range of several stations that will supply your radio needs, sensitivity and selectivity are of relatively little importance. However, if long-distance reception is desired in such a location, or if your location is distant from most stations, sensitivity and selectivity become important factors.

The "Roto Base" is being featured by RCA on its small 1941 radios—a sort

of pedestal which makes it a little easier to swivel the radio in taking advantage of the directional effect of the loop antenna. For three reasons it is of no practical use: 1) the radio is best enjoyed when directed toward the listener; 2) the directional effect in these small radios is relatively minor; 3) the stiffness of the power cord is such as to serve to obstruct the swivel motion.

In the following ratings, all radios, unless otherwise stated, have in common: 1) ac-dc operation, 2) no excessive shock hazard, 3) no tone control, 4) no push-buttons, 5) adequately suppressed images (whistles), 6) built-in antenna (usually a loop) with provision for connecting an external aerial, 7) plastic (molded) cabinet.

Qualifications of bad, poor, fair, good and excellent, in reference to tone, volume, &c, take into consideration the average characteristics of a radio of the type and size to which the rating refers. In other words, "excellent tone" for the RCA 10X, means excellent tone for a midget radio.

Acceptable

(In order of quality without regard to price)

Crosley Model 24AU (Crosley Radio Corp., Cincinnati). \$29.95, list. Table. A-c. 7 tubes. 540 to 1,620 kilocycles, 1.6 to 5.0 and 6.0 to 18.0 megacycles. Continuously variable tone control. Tone, volume, sensitivity and selectivity excellent. Appearance poor. Dial movement excellent and suitable for short-wave tuning. Slight shock hazard at chassis, ground and antenna connections.

Sears' Silvertone Cat. No.—1561 (Sears-Roebuck). \$17.95 plus transportation. Small table. A-c. 6 tubes. 540 to 1,600 kilocycles and 5.5 to 18.4 megacycles. Two-point tone control. 5 push-buttons, satisfactory action, easy to set. Tone and volume excellent; sensitivity and selectivity good. Appearance good. Minor shock hazard at all exposed points.

Echophone "Commercial" Model EC-1 (Echophone Radio Corp., Chicago). \$19.95. Large midget. 6 tubes (one for beat-frequency oscillator, which makes it a 5-tube radio from the point-of-view of the average listener). 545 to 2,100 kilocycles, 2.1 to 8.15 megacycles and 7.9 to 30.5 megacycles. For external antenna, open or doublet type, only. Tone good; volume fair; sensitivity excellent; selectivity excellent on the broadcast and medium wave length bands—good on short waves. Appearance excellent (styled after "communications receivers" rather than the conventional parlor design). Metal cabinet should be grounded to prevent shock hazard. Logging scale. Bandsread tuning with separate control and dial. Beat-frequency oscillator for logging and code reception. Standby switch cuts off plate supply if it is desired to keep tubes hot when not receiving (to prevent frequency drift when turning on later). Simple to operate despite extra controls. An excellent low-priced radio for the short-wave fan. Can be purchased through any of the radio mail-order houses.

Ward's Airline Cat. No.—612 (Montgomery Ward). \$17.88 plus transportation. Small table. 6 tubes. 528 to 1,600 kilocycles

and 2.3 to 6.5 megacycles. Continuously variable tone control. 6 unsatisfactory push-buttons. Tone, volume, sensitivity and selectivity good. Appearance excellent—wood cabinet. Shock hazard in setting push-button. Tuning knob on side of cabinet. Tuning difficult on short-wave.

RCA Model 16X2 (RCA Mfg. Co. Camden, N. J.). \$19.95, list. Large midget. 6 tubes. 540 to 1,720 kilocycles. Two-point tone control. Tone, volume and sensitivity excellent; selectivity fair to good. Some whistles. Appearance good. "Roto base" (see report). Phono jack. Shock hazard at antenna connection.

Crosley Model 21AQ. \$25.95, list. Small table. A-c. 5 tubes. 550 to 1,600 kilocycles, 2.3 to 2.5 and 5.5 to 15.0 megacycles. Continuously variable tone control. 5 push-buttons easy to set and reliable. Tone, volume, sensitivity and selectivity good. Appearance fair. Slight shock hazard at antenna and ground connections. Broadcast stations come through on police band.

Lafayette Model C-117 (Lafayette Radio Corp., NYC). \$20.95. Medium table. 7 tubes including tuning eye. 540 to 1,720 kilocycles, 2.2 to 7.5 megacycles and 7.5 to 24 megacycles. Continuously variable tone control. Tone excellent; volume good; sensitivity fair; selectivity good. Whistles bad. Appearance fair. Wood cabinet. Radio tested was dead above 16 megacycles. Phono jack. Shock hazard at all exposed parts.

Emerson Model DR-343 (Emerson Radio & Phonograph Corp., NYC). \$19.95, list. Large midget. 5 tubes. 540 to 1,600 kilocycles and 5.8 to 18.3 megacycles. Two-point push-button tone control. Tone, volume, sensitivity and selectivity good. Appearance good.

Philco Model 230-T (Philco Radio & Television Corp., Chicago). \$32.50, list. Small table. A-c. 7 tubes. 540 to 1,600 kilocycles and 1.6 to 3.5 megacycles. Two-point tone control. Tone good; volume fair to good; sensitivity and selectivity good. Appearance

ance good. Contrary to instructions, a special *Philco* antenna is not required when using an external aerial—any aerial can be clipped on or plugged in.

Admiral Model 51-K6 (Continental Radio & Television Corp., Chicago). \$24.95, list. Large midget. A-c. 6 tubes. 535 to 1,730 kilocycles and 5.65 to 18.1 megacycles. Tone good; volume fair; sensitivity good on short waves, excellent on broadcast band; selectivity good. Appearance good. Tuning difficult on short waves. Apparently the same chassis, and essentially the same cabinet size as *Knight* Cat. No. B10537 at \$13.65.

Knight Cat. No. B10550 (Allied Radio Corp., Chicago). \$20.95. Table. A-c. 535 to 1,630 kilocycles and 5.5 to 18.1 megacycles. Continuously variable tone control. 6 unsatisfactory push-buttons. Tone and volume fair to good; sensitivity and selectivity good. Appearance fair—wood cabinet. Phono jack. Tuning difficult on short wave. Illustration in catalog did not show model with tone control.

RCA Model Q20. \$24.95, list. Large midget. A-c. 5 tubes. 550 to 1,800 kilocycles and 4.5 to 18.0 megacycles. External antenna only. Two-point tone control on rear of chassis. Tone and volume fair to good; sensitivity and selectivity good. Appearance fair. Jack for phono pickup.

Emerson Model ED-354. \$24.95, list. Medium table. A-c. 5 tubes. 550 to 1,600 kilocycles. Two-point tone control. Tone good to excellent; volume excellent; sensitivity and selectivity good. Appearance fair. Slight shock hazard at antenna and ground connections.

Philco Transitone Model PT-44. \$18.95, list. Large midget. 5 tubes. 540 to 1,600 kilocycles. Tone good; volume excellent; sensitivity and selectivity excellent. Attractive wood cabinet. Shock hazard at antenna connection.

Philco Transitone Model PT-6. \$19.95, list. Midget. 5 tubes. 540 to 1,600 kilocycles. Tone good; volume excellent; sensitivity excellent; selectivity fair. Attractive appearance. Wood cabinet. New type oval speaker which has advantages. Shock hazard when disconnecting loop to change over to antenna.

Crosley Model 11-AH. \$17.95, list. Large midget. 5 tubes. 540 to 1,600 kilocycles. Tone and volume good; sensitivity excellent; selectivity good. Carrying handle.

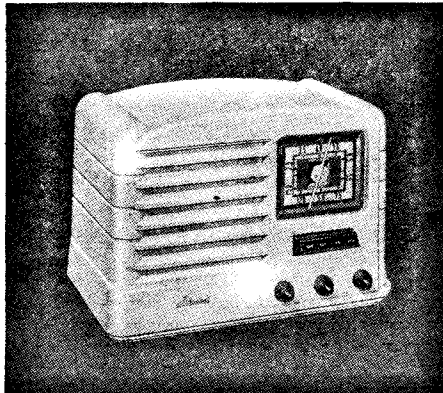
Admiral Model 47-J55. \$20.95, list. Small table. 5 tubes. 535 to 1,630 kilocycles and 2.8 to 6.38 megacycles. Tone fair to good; volume fair; sensitivity fair; selectivity good. Attractive period wood cabinet.

Zenith Model 6D526 (Zenith Radio Corp., Chicago). \$24.95, list. Large midget. 550 to 1,600 kilocycles. 6 tubes. Tone fair; volume, sensitivity and selectivity good. Appearance good. Loop worked better with jumper bar off. Shock hazard at ground and antenna posts. Same set as Model 6D525 except for different cabinet with better ventilation.

Zenith Model 6D525. \$19.95, list. Large midget. 6 tubes. 550 to 1,600 kilocycles. Tone fair; volume good; sensitivity good; selectivity good. Appearance good. Loop worked better with jumper bar off. Shock hazard at ground and antenna posts.



KNIGHT 49-J6: PRICE \$12.45



ADMIRAL 49-J6: PRICE \$19.95
\$7.50 difference. But the same chassis

ivity good. Appearance good. Loop worked better with jumper bar off. Shock hazard at ground and antenna posts.

Emerson Model EH-342. \$22.95, list. Medium table. 5 tubes. 540 to 1,600 kilocycles. Tone good to excellent; volume fair to good; sensitivity and selectivity good. Appearance fair.

Crosley "Fiver" Model 20AP. \$19.95, list. Small table. A-c. 5 tubes. 550 to 1,600 kilocycles, 2.3 to 2.5 megacycles and 5.5 to 15.0 megacycles. Tone, volume, sensitivity and selectivity good. Appearance fair. Slight shock hazard at antenna and ground posts. Some whistles.

Admiral Model 50-J6. \$24.95, list. Small table. 6 tubes including ballast. 535 to 1,630 kilocycles and 2.8 to 6.58 megacycles. 4 unsatisfactory push-buttons. Tone, volume, sensitivity and selectivity good. Appearance excellent—walnut cabinet. Shock hazard at push-button set-up screws.

RCA Model 45X-16. \$17.95, list. Large midget. 5 tubes. 550 to 1,600 kilocycles. Tone, volume and sensitivity fair; selectivity good. Whistles. Wood cabinet—fair appearance. "Roto base" (see report).

Philco Transitone Model PT-25. \$9.95, list. Small midget. 5 tubes. 540 to 1,720 kilocycles. Attached (hank) antenna. Tone good; volume excellent; sensitivity excellent; selectivity good. Appearance fair.

Sears' Silvertone Cat. No. —3351. \$9.45 plus transportation. This is the Sears' "Commentator," a 5-tube midget. 540 to 1,600 kilocycles. 4 push-buttons were in-

operative—due to faulty design—on the model tested and two other models inspected. Tone and volume good to excellent; selectivity good. Appearance excellent. Shock hazard at antenna post. Slight hum. Automatic volume control action only fair. *This radio rates as "Not Acceptable" for push-button tuning.*

RCA "Little Nipper" Model 10X. \$14.95, list. Midget. 5 tubes. 540 to 1,720 kilocycles. Tone excellent; volume and sensitivity good; selectivity fair. Appearance excellent. "Roto base" (see report). Phono jack. Check this radio for hum. Shock hazard at antenna connection.

Lafayette Model S-165. \$9.95 plus transportation. Midget. 5 tubes. 540 to 1,700 kilocycles. Tone and volume good; sensitivity fair; selectivity excellent. Whistles bad. Attractive wood cabinet.

Admiral Model 45-J5. \$14.95, list. Large midget. 5 tubes. 535 to 1,630 kilocycles and 2.8 to 8.58 megacycles. Tone, volume, sensitivity and selectivity good. Whistles on both bands. Appearance good. Ivory color. Apparently the same chassis, and substantially the same cabinet size as *Knight* Cat. No. B10535 at \$10.15. Same models in black: *Admiral* 44-J5 at \$9.95, list; *Knight* Cat. No. B10533 at \$8.15.

Emerson Model EP-301. \$12.95, list. Midget. 5 tubes. 540 to 1,620 kilocycles. Tone good; volume fair; sensitivity and selectivity good. Appearance good.

Knight Cat. No. B10531. \$10.95. Large midget. 6 tubes including ballast. 535 to 1,630 kilocycles and 2.8 to 6.58 megacycles. Four unsatisfactory push-buttons. Tone, volume, sensitivity and selectivity good. Appearance fair. Shock hazard at push-button adjustment screws. Flimsy plastic cabinet which overheated somewhat.

Admiral Model 12-B5. \$15.95, list. 540 to 1,730 kilocycles and 6.65 to 17.1 megacycles. Tone and volume fair; sensitivity and selectivity good. Whistles bad. Appearance good. Short-wave band impractical due to variable sensitivity and difficult tuning. Apparently same chassis and substantially the same size cabinet, as *Knight* Cat. No. B10536 at \$9.85.

Admiral Model 15-D5. \$9.95, list. Midget. 5 tubes. 540 to 1,730 kilocycles. Tone, volume, selectivity and sensitivity fair. Appearance good.

Emerson Model EC-301. \$9.95, list. Midget. 5 tubes. 550 to 1,550 kilocycles. Tone, volume, sensitivity and selectivity fair. Appearance fair. Handle for carrying.

RCA Model 45X1. \$9.95, list. Small midget. 5 tubes. 540 to 1,720 kilocycles. Attached (hank) antenna. Tone, volume, sensitivity and selectivity fair. Some whistles. Appearance fair. Some shock hazard.

Ward's Airline Cat. No. —420. \$5.75 plus transportation. A midget midget. 4 tubes. 540 to 1,720 kilocycles. Tone and volume fair; sensitivity good; selectivity and whistles bad. Appearance good. Despite its small size, this radio is somewhat more than a novelty, and represents a remarkable value for the money. It is selective enough to provide satisfactory reception on an adequate number of stations.