

Federal ortho-sonic Radio Receivers

RTHO-SONIC—of, pertaining to, or producing tone values in sound reproduction corresponding exactly to the natural tones. In producing Federal Ortho-sonic models, we have anticipated the critical tests to which home-owners are putting various radio receivers.

The Federal line with the *Ortho-sonic* principle brings an entirely different reproduction of radio to the home. It is perfect in its exactness and gives a fidelity of tone superior in quality to that of any radio reproducing instrument known.

The *Ortho-sonic* principle is the development of genius. It makes possible a true reproduction of practically all musical tones. Now, the listener may enjoy to the full the deep, rich tones of the organ and bass instruments, which have been so lacking in radio reception.

Appearance is a great factor in the choice of a radio. Present-day cabinet styles are being carefully chosen. Federal *Ortho-sonic* receivers are built in five or seven tube models and placed in cabinets of our own design and choice. The woods are selected. The finish will match the appointments of any home, and the artistic lines of the cabinet styles will add richness and beauty to the room in which any one of them may be placed.

Test the sensitivity of a Federal Ortho-sonic radio receiver. Note its extreme simplicity of operation. Select a broadcast station prominent among radio listeners, then change to another station—the Ortho-sonic will actually reproduce tone values exactly as they are broadcast, and without distortion or interference from other stations. No matter where you are, you may be sure that entertaining radio programs from any part of the country are yours at a simple twist of the controls. Federal Ortho-sonic radio sets are easily installed and operated; each receiver contains an instruction book which we ask you to read carefully before you attempt to operate the set. The instruction book has a convenient log card in the center spread, which will enable you to keep a record of the stations you select.

Simplified operation is now a popularly-accepted principle, and an important one in the choice of a radio receiver. A child may step up to a properly-installed Federal *Ortho-sonic*, and operate it with ease. The panel arrangement is easily understood and highly in keeping with the general appearance of the receiver.

Back of the genius in the development of Federal *Ortho-sonic* Radio receivers may be seen the handiwork of careful radio experts. Each Federal workman skillfully does his part in the construction of this efficient receiver.



Model A-10 Federal ortho-sonic Radio

FIVE Tube Receiver. Tuned Radio-Frequency type. Extremely simple to operate. Three tuning dials log practically together. No other adjustments necessary in tuning. Adapted for operation with either "wet battery" or "dry battery" tubes. A well constructed cabinet, finished in beautiful brown mahogany tone. Ortho-sonic principle provides the farthest advance in tonal quality. Length, 24 inches; height, 11 inches; depth, 12 inches.

PRICE WITHOUT
ACCESSORIES

\$75.00

Complete with accessives



Model B-20 Federal ortho-sonic Radio

FIVE Tube Receiver of the Tuned Radio-Frequency type. Extreme simplicity of tuning obtained by micrometer controls. Station indicators located behind glass ports. All delicate parts completely shielded against mechanical damage and electrical disturbances. Operates with either "dry battery" or "wet battery" tubes. Housed in a beautiful, genuine mahogany cabinet, finished in rich, brown tone. Cabinet arranged to accommodate all batteries or battery substitutes. The new Ortho-sonic principle provides the farthest advance in tonal quality. Length, 30 inches; height,

PRICE WITHOUT
ACCESSORIES

\$100.00

13 inches; depth, 15 inches.

Complete with accessories

145.00



Model B-30 Federal ortho-sonic Radio

AME as B-20 except that the new Federal adjustable speaker has been built into the cabinet. This design provides simple sweeping curves which add greatly to the general appearance of the cabinet. Speaker space is not cramped, but is sufficient to allow the fullest development of Ortho-sonic reproduction. Length, 30 inches; height, 20 inches; depth, 15 inches.

PRICE WITHOUT
ACCESSORIES

\$130.00

160.00



Model B-35 Federal ortho-sonic Radio

PRICE WITHOUT

Accessories

FIVE Tube Receiver. Balanced Tuned Radio-Frequency. Three tuning dials with micrometer controls. Operates with "wet or dry battery" tubes. Delicate parts completely shielded. Station indicators behind glass ports. Apparatus slides out to install tubes. Rich, brown tone mahogany cabinet. Internal space provided for accessories. Enclosed adjustable loud speaker. Exceptional volume and tonequality. Length, 35 inches; height, 43 inches; depth, 21 inches.



Model B-36 Federal ortho-sonic Radio

Price Without

\$2.50 00

Accessories

FIVE Tube Receiver. Balanced Tuned Radio-Frequency. Three tuning dials with micrometer controls. Operates with "wet or dry battery" tubes. Delicate parts completely shielded. Station indicators behind glass ports. Apparatus slides out to install tubes. Rich, brown tone mahogany cabinet. Internal space provided for accessories. Enclosed adjustable loud speaker. Exceptional volume and tone quality. Length, 35 inches; height, 43 inches; depth, 21 inches.

280,00 accession



Model C-20 Federal ortho-sonic Radio

SEVEN Tube Receiver. Tuned Radio-Frequency type. Especially designed for operation with its own integral loop. Remarkable volume and distance. All delicate parts completely shielded against mechanical damage and electrical disturbances. Tuning accomplished with two micrometer controls with station indicators visible behind glass ports. Cabinet of selected mahogany, finished in a rich brown. Accommodates all batteries or battery substitutes. Used with either "dry battery" or "wet battery" tubes. Length, 36 inches; height, 16

inches; depth, 18 inches.

Price Without Accessories

\$165.00



Model C-30 Federal ortho-sonic Radio

AME as C-20 except that the new Federal adjustable speaker has been built into the cabinet. The design of this speaker is such as to blend and soften the cabinet lines, producing a most harmonious result. Liberal space for sound amplification is provided, allowing the user to enjoy to the full the result of Orthosonic reception. Length, 36 inches; height, 23 inches; depth, 18 inches.

PRICE WITHOUT
ACCESSORIES

\$200.00



Federal ortho-sonic Radio

PRICE WITHOUT
ACCESSORIES

\$300.00

SEVEN Tube Receiver. Balanced Tuned Radio-Frequency. Two tuning dials with micrometer controls. Operates with "wet or dry battery" tubes. Delicate parts completely shielded. Station indicators behind glassports. Apparatus slides out to install tubes. Selected walnut cabinet with perfect inlay work. Beautiful two-tone finish. Internal space provided for accessories. Enclosed adjustable loud speaker. Exceptional volume and tone quality. Length, 27 inches; height, 54 inches; depth, 17 inches.

Federal Loud Speaker

No. 180—This powerful speaker is capable of handling tremendous battery voltages with the uniform increase in volume and quality of tone. It does not require additional tubes or batteries other than the number necessary for the efficient operation of the receiver.

Federal No. 180 Loud Speaker brings you clear signals with a tonal beauty unmatched in the loud-speaker field. This speaker will carry any amount of volume without distortion or breaking of signals.

It is the expert handiwork of sound-transmission engineers.

It stands twenty-eight inches high, with a bell throat eighteen inches in diameter, and is finished in beautiful crackle black enamel.



No. 180 LOUD SPEAKER

Federal Phonograph Speaker Unit

No. 185—This unit is normally supplied with a Victor-type adapter that slides over the tone arm.

It will pass to sound chamber, ume and tonal be no additional to no additional to necessary for the

No. 185 LOUD SPEAKER Phonograph Attachment complete with adapter and cord

It will pass to you, through the phonograph sound chamber, radio reception pleasing in volume and tonal beauty.

Federal phonograph loud speaker requires no additional tubes or batteries other than are necessary for the satisfactory operation of the receiver. It is highly recommended for use in enclosed loud speakers and in the base of speaker horns.

Federal No. 185 Loud Speaker . . \$9.50