

P
resenting

the new

PHILCO

for 1936

a musical instrument of quality

Illustrations and Descriptions

"PHILCO WAS STILL CONVINCED THAT PROVEN WORTH IS PREFERABLE TO RISKY EXPERIMENT"

The above words are reprinted from Time Magazine, page forty, issue of April 22, 1935. And Philco dealers throughout the United States well know, from ten years of trouble-free Philco experience, that the above quotation from Time Magazine expresses in a few words a basic Philco principle. Remember also, that Philco has today the world's largest research laboratories devoted exclusively to radio engineering.

In other words, the fundamental policy of the Philco engineers is to design radio receivers, not only always well abreast of all sound engineering developments, but particularly to design radios with every single part, circuit and feature absolutely tested and proven—and not risky experiments.

Philco dealers know this and appreciate it—because it is this very policy that has maintained for them a steadily growing volume of retail sales and profits through the years, and has saved them from endless service trouble, reverts and customer dissatisfaction. It is a policy that has preserved for the dealer his customers' goodwill, his store prestige and his proper, just net profits.

LET'S LOOK AT THE RECORD

THE YEAR 1926

In the year of 1926 tube trouble reached an almost unbearable peak for the radio dealer. You will recall that two years previously the 199 tube, the so-called "peanut" tube, used with dry batteries, was brought out, and it was heralded as a great and revolutionary development. Incidentally, it was developed by the world's largest electrical manufacturer. In fact—and you will remember—it was also adopted and used for those two years in the high-priced radios of the then largest radio manufacturer.

However, by the time 1926 arrived, receiving set troubles had multiplied alarmingly, due largely to the short life of these 199 peanut tubes and the unreliability of dry batteries. Philco foresaw this—recognized the inherent weaknesses in the 199 tube and dry batteries, and developed the Philco Socket Power.

The Philco Socket Power eliminated dry batteries, but better still, it made possible the convenient and economical use of the large storage battery tubes. And this combination of large tubes and Socket Powers became standard because it was trouble-free. Over 1,000,000 Philco Socket Powers were sold.

THE YEAR 1927

The Socket Power, in combination with storage battery tubes, remained the highly favored standard equipment until October, 1927. Then the AC tube was rushed on the market, and during the first few months it gave a world of trouble.

But the AC tube, in spite of its initial troubles, naturally and logically had a wide popular appeal. The idea behind the AC tube—the idea of direct light socket radio operation—deserved a wide public response because it brought real

convenience, real benefit to the public. And we all know that when any engineering development brings an actual, obvious, and fully apparent benefit, the retail buyer will stand for quite a bit of trouble. However, the benefit had better be real, and it had better be apparent.

In any event, the AC tube, an undeniably great engineering achievement, did survive its early difficulties and it was finally sufficiently perfected to come into its own and revolutionize radio for the benefit of everyone.

THE YEAR 1928

In June of 1928, Philco began the manufacture of Philco AC radio receiving sets. They were an instant success. In fact, they established a new standard of excellence in radio performance, particularly in purity and clarity of tone. These early Philco radios proved the wise judgment of Philco engineers when they decided to adopt the Hazeltine Neutrodyne circuit. Philco adopted this superior Neutrodyne circuit when important competitors elected to use less efficient circuits in an effort to avoid paying royalties to the Hazeltine Corporation. This decision instantly established Philco performance superiority.

From the beginning, these Philco radio receivers were designed and built with such skilled precision and such careful, accurate balancing of all units, that even today many thousands of these original Philco radios are operating to the complete satisfaction of the owners.

Built-in power supply was one of the novel features of those first Philcos. You will remember that other manufacturers were building the power supply as a separate unit—not built in. They needed to build it as a separate unit so it could readily be replaced in case of trouble.

On the other hand, the experience of Philco engineers with Socket Power units enabled them to build a trouble-free power supply, and to build it on the same base with the radio receiver proper. Naturally, this soon became standard practice. The other radio manufacturers again confirmed the judgment of Philco engineers.

THE YEAR 1929

The year of the screen grid tube! The year of automatic volume control! And the year that Philco jumped from 26th place to 2nd place in the radio industry! The screen grid tube was introduced during the Spring of 1929. At once there was a mad scramble on the part of most manufacturers to be the first to use it, and immediately, of course, there was an enormous amount of trouble with the first screen grid radio receivers.

The early screen grid tubes were not right in design. There was also a serious lack of uniformity in their manufacture. You will recall the poor selectivity, the cross talk and other receiver complaints that arose from grid current, secondary emission and non-uniformity of the early screen grid tubes. Engineers and servicemen won't forget this period of screen grid trouble.

In the meantime, Philco wisely waited. It stood on its policy of "proven tested worth" as against "hasty, risky experiment." It adopted the screen grid tube when nearly all the trouble had been ironed out, when it was practical and safe to use it. Therefore, those retail dealers who were concentrating on the sale of Philco avoided a world of costly trouble.

Philco started using the screen grid tube conservatively, the first Philco screen grid tube radio being at the bottom of the line, the lowest priced receiver. This first screen grid Philco proved that the screen grid tube was at last reaching efficiency and reliability. Then came the famous Model 95, the first practical automatic volume control radio using screen grid tubes. It swept the country.

The Philco Model 95 was the first commercial embodiment of an automatic volume control circuit using a diode rectifier. It created a sensation in the radio industry, and, needless to say, it was extensively copied everywhere.

Bear in mind that previous to this, radios with automatic volume control had been hard to use, impractical. But in the Model 95 the automatic volume control was so simplified and perfected that today it is so popular that only the cheapest of radios are without some degree of automatic volume control.

Another thing in connection with this record of Philco engineers—do you remember the great confusion in 1929 due to the fact that the radio manufacturers did not agree on a standard marking for radio dials? Those were the days when most radios were arbitrarily calibrated in a zero-to-one-hundred scale.

Some radios were calibrated in wave lengths. Some in kilocycles and some in two or more of these markings. It was confusing to the public and a trial to the dealer.

So Philco decided to calibrate all dials in a new but certainly obvious and logical way, namely, in "kilocycle channel numbers." These numbers represented the exact transmission frequencies or channels that had been assigned to the different standard broadcast stations. It was simplicity itself, and it became standard for the entire industry.

THE YEAR 1930

Philco became the leader in the radio industry in 1930. And Philco has been the undisputed leader year after year ever since. Small table model sets appeared on the Pacific Coast in 1930. And in spite of their poor performance, they sold rapidly. Pacific Coast sales records on these small radios indicated real possibilities for a nation-wide volume of business. Philco recognized the tremendous possibilities of this type of radio, provided it could be made to give satisfactory performance, including distance range, selectivity, and tone quality.

Therefore, Philco engineers concentrated on a table model receiver giving real performance. The result was the Model 20 Baby Grand, which was placed on the market in August, 1930, the first Philco Baby Grand, and retailing for only \$68, complete with tubes.

The demand for this great little radio was tremendous. A vast new strata of radio buyers was uncovered. The judgment of Philco engineers in building quality performance in a table model was more than justified. The rest of the industry followed as rapidly as possible, but Philco had become the leader in radio, in dollar volume as well as unit volume.

Tone control! Another contribution to radio by Philco engineers in 1930. At first, competitors scoffed at tone control. They attempted to belittle it, but today tone control is used in one form or another on the better models of all radio manufacturers.

Tuning condensers floated on soft rubber! Another Philco engineering achievement in the year of 1930. A patented Philco improvement that prevents microphonic howling and tone distortion. This feature—the floating of the tuning condenser on soft rubber—has become indispensable to fine radio performance, especially in automobile receivers and short-wave receivers.

About this same time, Philco engineers also succeeded in making Philco tubes so rugged and durable that rough handling could not harm them. In fact, so rugged that they could be successfully shipped mounted in the radio receiver sockets. This not only cut down tube troubles amazingly, but was also a great convenience to the retail dealer. This has now become standard practice for all manufacturers who use tubes of the same rugged design as the Philco High Efficiency Tubes.

Continuing with this record of Philco engineering; through the years—

THE YEAR 1931

The first Philco-Transitone automobile radio was produced in January, 1931. At that time, many in the industry felt that automobile radio was simply a plaything for the wealthy—a passing novelty. But Philco decided that a vast market, embracing all classes, awaited automobile radio, provided always that it gave real performance, proper service and was priced right.

So the first Philco-Transitone was designed and built with infinite care.

Philco engineers even went so far as to install a roof laboratory for automobiles which meant the construction of a huge elevator to carry the automobiles to this roof-top laboratory. Philco-Transitone automobile radio received all the benefits

(Continued on Page 40)

Science and Invention march on—

THE NEW 1936 PHILCOS

REACHING NEW HEIGHTS OF TONE,
POWER... FOREIGN RECEPTION

In Cabinets of Exquisite Charm

The finest Philcos ever built! The most exciting reception in all radio history! Your favorite American stations—plus Europe, Australia, South America—all the world—more perfectly than you ever dreamed! Startling realism of tone! All yours with these new musical instruments of quality!

Exactly the models your customers want at prices they want to pay! Forty-three Philcos from Baby Grands to magnificent Inclined Sounding Board models—priced from \$20 to \$600.

Philcos for American reception, including Police Calls, Amateur, Ship and Aircraft Stations; Philcos for both

American and Foreign reception, with built-in Aerial Selector to automatically maintain maximum power on every wave band; Philcos that cover the new U. S. Government Weather Forecasts; Philcos for every kind of electric current in town or country.

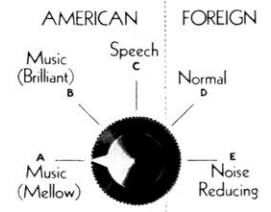
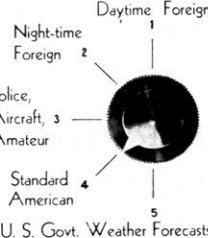
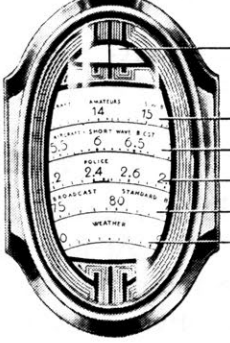

A wide selection of gorgeous cabinets carefully fashioned from choice and expensive woods. Of exquisite charm, they blend perfectly into the finest homes!

These new Philcos include every advance of radio science and invention. And, even more important, they possess a heritage of quality from over 5,500,000 Philcos which have preceded them—a heritage unequalled in radio!

NEW PHILCO ENGINEERING ACHIEVEMENTS

Philco, in accord with its traditional policy, again makes the Balanced Unit Whole the dominating principle and practice in the new 1936 line. This exact matching and balancing of each feature with all others continues to

distinguish every Philco as a true musical instrument of quality. Representative of innumerable advances embodied in the new 1936 line are these features of the Philco 116X.

 <p>PROGRAM CONTROL Permits you to adjust the radio to receive each program at its best. Points A and B for music from American Stations. Point C for speech from American Stations. Points D and E for Foreign Stations.</p>	 <p>AUTOMATIC AERIAL SELECTOR To span oceans you need a scientifically designed All-wave Aerial System. Used with the Philco All-wave Aerial, the built-in Aerial Selector automatically switches in the exact electrical values needed to maintain maximum power on each wave band. In effect, five aeriels in one!</p>	 <p>PRECISION RADIO DIAL Station settings are spaced farther apart on this dial. Result: The easiest, most precise tuning in all radio. Note also Shadow Tuning.</p> <p>SHADOW TUNING For perfect tone you must have perfect tuning. Philco Shadow Tuning shows you visually when each station is tuned-in perfectly.</p> <p>FIVE WAVE BANDS COVERING EVERY BROADCAST SERVICE</p>	 <p>INCLINED SOUNDING BOARD SLOPE for HIGH NOTES (Sparkle-Brilliance) LARGE AREA for LOW NOTES (Depth-Sonority)</p> <p>TWO-IN-ONE SPEAKER STIFF CENTER for HIGH NOTES FLEXIBLE RIM for LOW NOTES</p> <p>HIGH-FIDELITY Fastly extended musical range brings out the overtones that identify and distinguish the many and varied musical instruments. Indispensable for full music appreciation.</p> <p>INCLINED SOUNDING BOARD The area and slope of the Philco Inclined Sounding Board preserve and project up to ear-level all the extended musical range and clarity of tone created by Philco High-Fidelity and Philco Acoustic Clarifiers.</p> <p>ACOUSTIC CLARIFIERS Clarity of tone such as you've never heard before! Exclusive Philco Acoustic Clarifiers automatically prevent unpleasant barrel-like boom.</p>
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RESULT: Precision Control Over Every Broadcast on the Air

RESULT: True, Clear, Undistorted Philco Tone

PROTECT EVERY SALE BY INSTALLING THE NEW PHILCO ALL-WAVE AERIAL

Poor aerials and poor aerial installations are a menace to the whole short-wave boom! If customers do not get satisfactory foreign reception they will blame the set and the dealer who sold the set; they will tell others; a derogatory word-of-mouth campaign will start and, inevitably, short-wave sales will suffer.

Don't let this happen! Install the new Philco All-wave Aerial—protect every sale you make and create satisfied customers!

With this scientifically designed aerial and a powerful new All-wave set, owners enjoy more thrilling, more fascinating foreign reception than they've ever had before. Instead of knocking, they boost short-wave! The word-of-mouth campaign is favorable—it creates new prospects—the boom is saved!

Do your share to continue the boom by making sure of satisfied customers, with the Philco All-wave Aerial—the easiest-to-sell, easiest-to-install antenna system ever offered.

NEW PHILCO ALL-WAVE AERIAL

The Philco All-wave Aerial is specially engineered to pull in the faintest signal from thousands of miles away—and to reduce to a minimum, man-made static and local electrical interference! It reduces noise on all makes of sets, on both American and Foreign reception!

Used with a Philco All-wave Aerial, the Automatic Aerial Selector—which is built into every short-wave Philco—automatically switches-in the exact electrical values needed to maintain maximum power on each wave band!

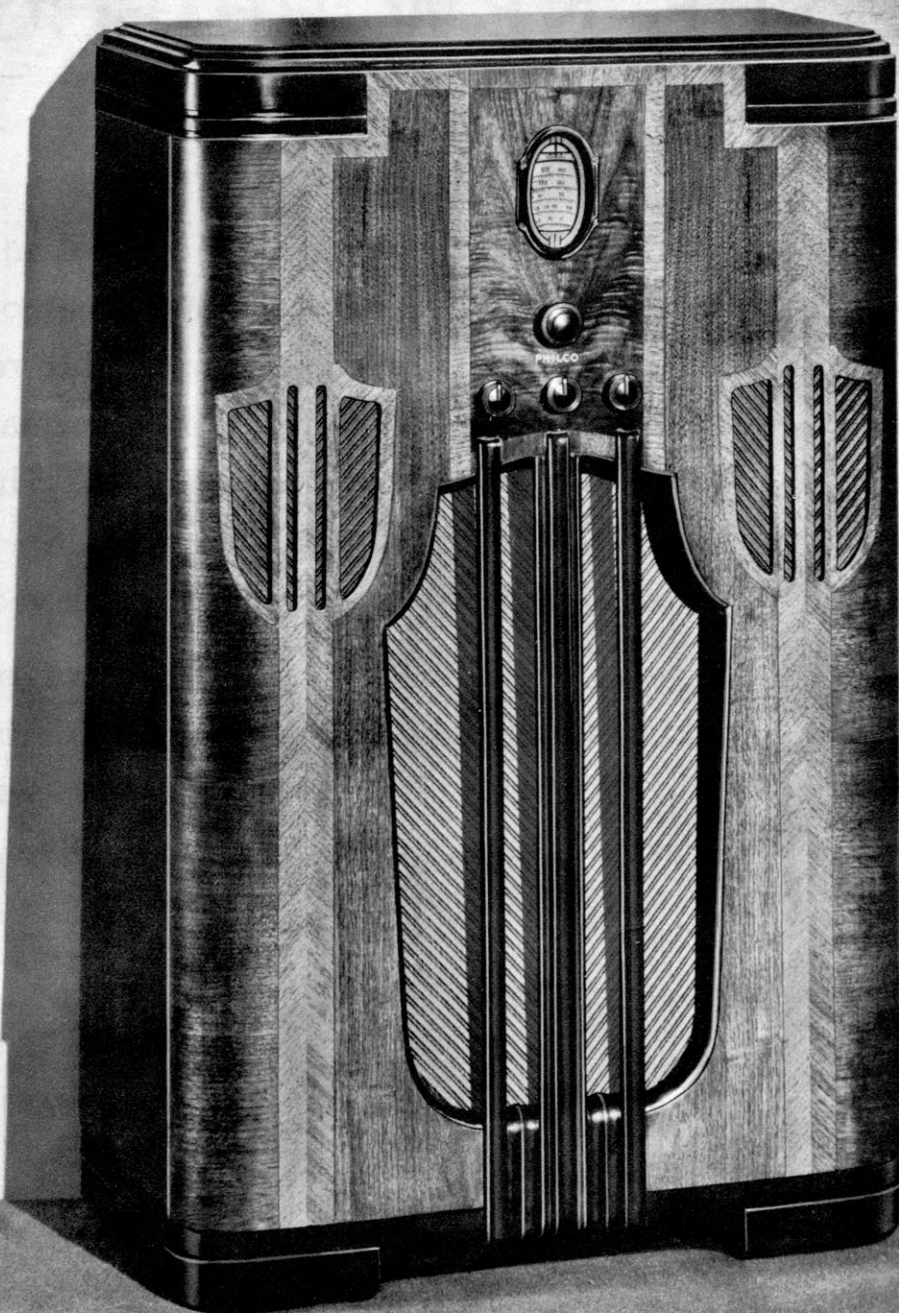
The Philco All-wave Aerial is complete with transformer, aerial and transmission line, insulators, lightning arrestor and all other necessary accessories. All connections are factory-soldered.

LIST PRICE \$5.00

(Set transformer is extra for radios
without built-in Aerial Selector)



EVERY 1936 SHORT-WAVE PHILCO HAS AN AUTOMATIC AERIAL SELECTOR— BUILT-IN!



**THE FINEST
RADIO EVER
BUILT! . . . Every
Broadcast Service On
the Air — True, Clear,
Undistorted Philco Tone!**

**PHILCO 116X
\$175**

Complete with scientifically designed
Philco All-wave Aerial . . . \$180

Setting a new standard in radio furniture!
Its appearance proclaims its function!
Inclined Sounding Board, Acoustic Clarifiers,
Wide Angle Sound Diffusers, Precision Radio Dial—all beautifully dovetailed—all fitting naturally—all telling the world that this is a real "Musical Instrument of Quality." Choice, straight-grained American and Butt Walnut—delicate, exquisitely fashioned inlays—gracefully curving panels of contrasting grains—soft, hand-rubbed finish—all these combine to make this a cabinet of incomparable beauty! Smart, modern, yet blending perfectly into any setting, it will become a treasured possession in thousands of fine American homes.

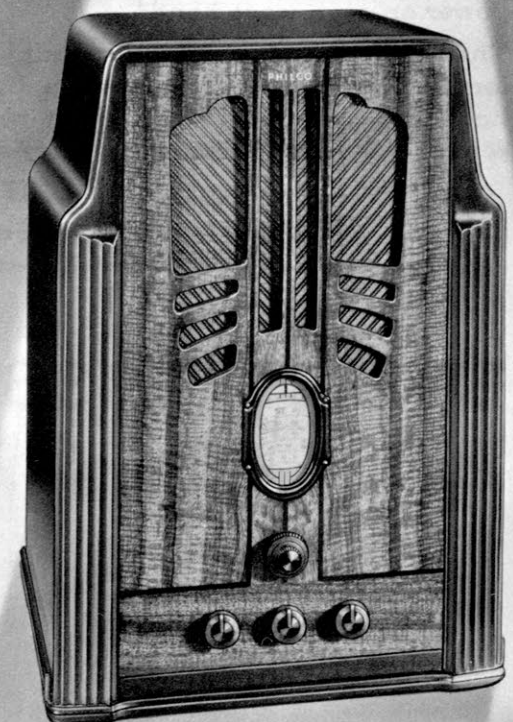
Dimensions
26 $\frac{3}{4}$ " Wide 42 $\frac{1}{4}$ " High 13 $\frac{3}{4}$ " Deep

PHILCO 116B..\$97.50

Complete with scientifically designed
Philco All-wave Aerial . . . \$102.50

For the radio that gets every broadcast service on the air, Philco designers have created this outstanding Baby Grand. A cabinet in keeping with its powerful 116 chassis. The instrument panel of beautifully figured East Indian Laurel, the fluted pilasters of darker tone, and the double curved end panels all combine to make this a masterpiece among table models. Hand-rubbed to a soft, lustrous finish.

Dimensions
16 $\frac{3}{8}$ " Wide 23 $\frac{1}{2}$ " High 12 $\frac{1}{4}$ " Deep



High Fidelity

AMERICAN AND FOREIGN RECEIVER

None of the features listed below is important unless all of the features have been designed to match each other to achieve a **Balanced Unit Whole**. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

MAJOR TONE FEATURES

High Fidelity Audio System—15 Watts

Vastly extended musical range brings out the overtones that identify and distinguish the many and varied musical instruments. Indispensable for full music appreciation. Power Output covering the full range from the faintest whisper to the thunderous finale of the greatest symphony orchestra.

Acoustic Clarifiers

Automatically eliminate unpleasant barrel-like boom, resulting in clarity of tone beyond all previous radio experience.

Philco Inclined Sounding Board

The large area and the slope of the Philco Inclined Sounding Board preserve, and project up to ear-level, all the extended musical range and clarity of tone created by the Philco High Fidelity Audio System and Philco Acoustic Clarifiers.

Program Control

To adjust the radio to receive each program at its best.

- A. Music (Mellow)—American Stations.
- B. Music (Brilliant)—American Stations.
- C. Speech—American Stations.
- D. Normal—Foreign Stations.
- E. Noise-Reducing—Foreign Stations.

New High Fidelity Audio Tubes—Exclusive with Philco

Giving the mellowness so necessary for true High Fidelity Tone.

Two-In-One High Fidelity Speaker

Specially processed center for reproduction of high notes (treble). Flexible rim for reproduction of low notes (bass.) Auditorium volume without distortion.

Wide Angle Sound Diffusion

Scientifically designed diffusers spread all sound evenly throughout the room.

Live Rubber Condenser Mounting

Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

Automatic Bass Compensation

To compensate for the lessened ability of the normal ear to hear the low notes (bass) in true proportion at ordinary low room volumes, Philco Bass Compensation automatically brings up the bass as volume is turned down.

Shadow Tuning

For perfect tone you must have perfect tuning. Philco Shadow Tuning shows you visually when each station is tuned-in perfectly.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit

Through the scientific balancing of each unit with all others, Philco engineers have raised the all-wave performance of the superheterodyne circuit to new heights of perfection.

Non-Radiating

Built-in filter prevents radiated interference in other nearby sets.

11 Philco High Efficiency Tubes. Types—78, 76, 78, 77, 5Z3, 77, 78, 37, 42, 6A3, 6A3

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

Power Line Noise Rejectors

Keep power line noises out of the radio.

Rigid Chassis Base

Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded

Both circuits and tubes metal shielded throughout to attain maximum amplification.

Safe from Fire and Shock

Built to conform in every respect to the Underwriters' Safety Standards.

MAJOR ALL-WAVE FEATURES

Broadcast Band Coverage

Covers every broadcast service on the air. Daylight Foreign and American Short-Wave Broadcasts . . . Night-time Foreign and American Short-Wave Broadcasts . . . Both Police Call Bands, Aircraft, Ship and Amateur Bands . . . Standard American Band . . . U. S. Government Weather Forecasts.

Glowing Arrow Wave Band Indicator

Glowing arrow shows visually the band in use.

Full Automatic Volume Control

To counteract fading of distant stations and blasting of local stations.

Precision Radio Dial

Station settings are spaced farther apart on this dial. Result: The easiest, most precise tuning in all radio.

Two-Speed Planetary Drive Station Selector

- A. Fast Speed for swift turning.
- B. Slow Speed for precision tuning of short-wave stations. 80 to 1 ratio.

Noise Excluding Signal Amplifier (Robot Tuner)

Automatically amplifies the station signal while rejecting interference and image noise.

Triple Selector System

Automatically rejects interfering stations and gives hairline selectivity on both American and Foreign Broadcasts.

Automatic Aerial Selector

To span oceans requires a scientifically designed All-wave aerial system. Used with the Philco All-wave Aerial, the built-in Aerial Selector automatically switches in the exact electrical values needed to maintain maximum power on each wave band. In effect, five aerials in one!

Certain variations in tone features naturally exist between table and inclined sounding board models because of the much larger sounding board area in the "X" Models.

To get out of this receiver all the performance which has been built in, be sure to equip it with a Philco All-wave Aerial.

Philco 116



**FINER
THAN THE
FINEST!**



**You Are Your
Own Orchestra
Leader!**

**PHILCO 680x
\$250**

Complete with scientifically designed
Philco All-wave Aerial \$255

As truly indicative of fine music as a priceless Stradivarius. Inclined Sounding Board, Acoustic Clarifiers, Wide Angle Sound Diffusers—all proclaiming a true Musical Instrument of Quality. All controls and dial concealed. Cross-fire striped Walnut in matched panels with marquetry and gracefully curved pilasters. "IT'S THE TOP."

Dimensions

28⁵/₈" Wide 41⁵/₈" High 17¹/₂" Deep

Super High Fidelity

A M E R I C A N A N D F O R E I G N R E C E I V E R

None of the features listed below is important unless all of the features have been designed to match each other to achieve a **Balanced Unit Whole**. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

MAJOR TONE FEATURES

Super High Fidelity Audio System—15 Watts

The widest tonal range, the most faithful life-like reproduction ever achieved in radio. All musical instruments, all voices, are reproduced with the overtones that identify them and distinguish them, one from another. Indispensable for full music appreciation.

Power output covering the full range from the faintest whisper to the thunderous finale of the greatest symphony orchestra.

Acoustic Clarifiers

Automatically eliminate unpleasant barrel-like boom, resulting in clarity of tone beyond all previous radio experience.

Philco Inclined Sounding Board

The large area and the slope of the Philco Inclined Sounding Board preserve, and project up to ear-level, all the extended musical range and clarity of tone created

by the Philco Super High Fidelity Audio System and Philco Acoustic Clarifiers.

New High Fidelity Audio Tubes—Exclusive with Philco

Giving the mellowness so necessary for true High Fidelity Tone.

Two-In-One High Fidelity Speaker

Specially processed center for reproduction of high notes (treble). Flexible rim for reproduction of low notes (bass). Auditorium volume without distortion.

Music Interpretation Controls

Enable the discriminating listener to interpret any selection in his own way to exactly satisfy his own musical taste. In effect, he becomes his own musical conductor.

A. Fidelity Control—Treble

To widen the treble range to the maximum fidelity for each station and program.

B. Fidelity Control—Bass

To adjust the bass to the proper proportion for each station and program. (Amplified Bass Compensation.)

Automatic Resonance Governor

Automatically prevents overloading and undesirable resonance.

Wide Angle Sound Diffusion

Scientifically designed diffusers spread all sound evenly throughout the room.

Live Rubber Condenser Mounting

Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

Amplified Shadow Tuning

For perfect tone you must have perfect tuning. Philco Amplified Shadow Tuning shows you visually when each station is tuned-in perfectly. Amplified Shadow Tuning is used on this Philco to give you, without effort, the extra fineness of tuning to match the extra fineness of tone.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit

Through the scientific balancing of each unit with all others, Philco engineers have raised the all-wave performance of the superheterodyne circuit to new heights of perfection.

Non-Radiating

Built-in filter prevents radiated interference in other nearby sets.

15 Philco High Efficiency Tubes.

Types—78, 76, 78, 85, 76, 6F7, 5Z3, 78, 6B7, 78, 85, 85, 80, 6A3, 6A3

This mighty combination of powerful tubes, matched and balanced each with the other, actually gives the power and selectivity of 20 (or more) less-efficient tubes.

Power Line Noise Rejectors

Keep power line noises out of the radio.

Rigid Chassis Base

Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded

Both circuits and tubes metal shielded throughout to attain maximum amplification.

Safe from Fire and Shock

Built to conform in every respect to the Underwriters' Safety Standards.

MAJOR ALL-WAVE FEATURES

Broadcast Band Coverage

Both Daylight and Night-time Foreign and American Short-Wave Broadcasts . . . Both Police Call Bands, Aircraft, Ship and Amateur Bands . . . Standard American Band . . . U. S. Government Weather Forecasts.

Glowing Arrow Wave Band Indicator

Glowing arrow shows visually the band in use.

Twin Automatic Volume Control

Doubly counteracting fading of distant stations and blasting of local stations.

Precision Radio Dial

Station settings are spaced farther apart on this dial. Result: The easiest, most precise tuning in all radio.

Two-Speed Planetary Drive Station Selector

- A. Fast Speed for swift turning.
- B. Slow Speed for precision tuning of short-wave stations. 80 to 1 ratio.

Noise Excluding Signal Amplifier (Robot Tuner)

Automatically amplifies the station signal while rejecting interference and image noise.

Triple Selector System

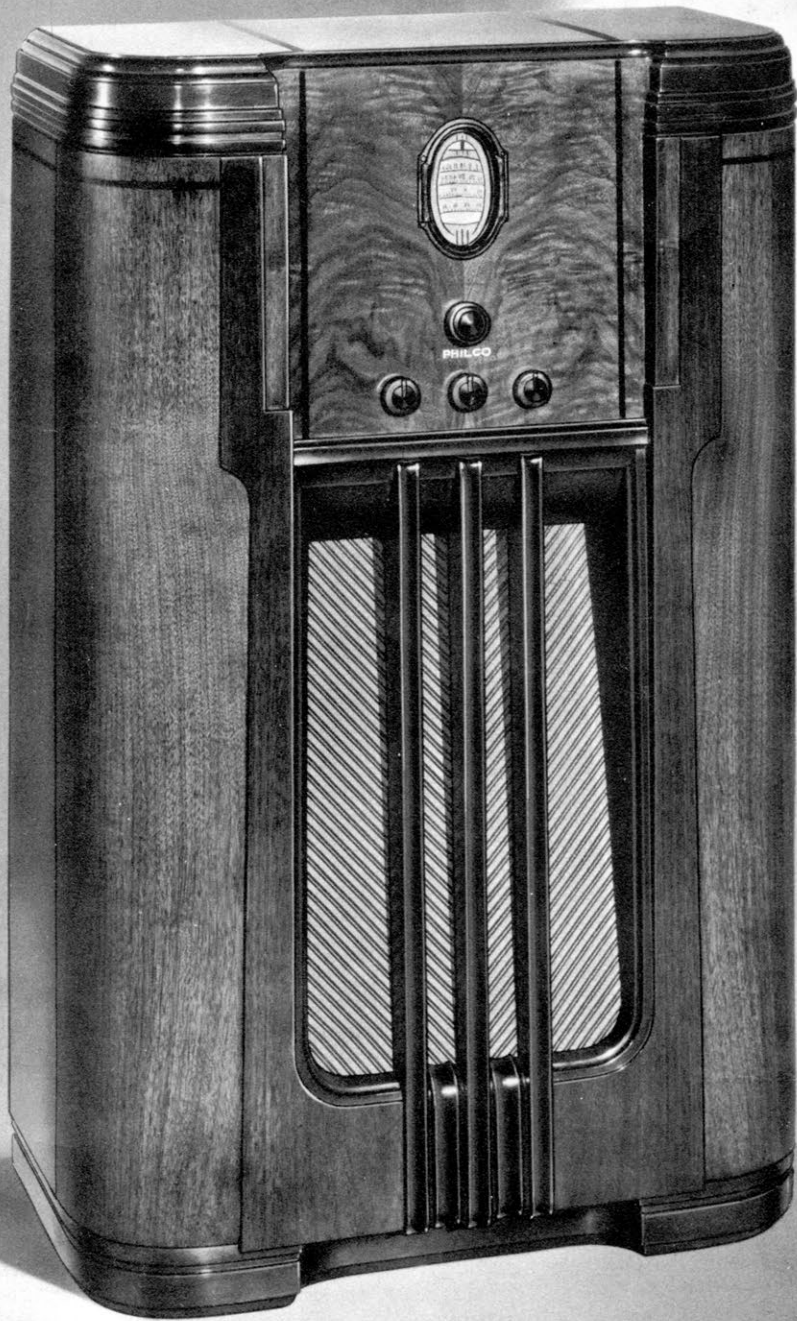
Automatically rejects interfering stations and gives hairline selectivity on both American and Foreign broadcasts.

Automatic Aerial Selector

To span oceans requires a scientifically designed All-wave aerial system. Used with the Philco All-wave Aerial, the built-in Aerial Selector automatically switches-in the exact electrical values needed to maintain maximum power on each wave band. In effect, a separate aerial for each band.

To get out of this receiver all the performance which has been built in, be sure to equip it with a Philco All-wave Aerial.

Philco 680



1,547,000,000

ONE AND A HALF BILLION!

PHILCO 660X \$137.50

Complete with scientifically designed
Philco All-wave Aerial . . . \$142.50

The 16X could well claim to be "the standard radio cabinet of the world." 1,547,000,000 pictures of the 16X cabinet appeared in public print last season. Philco dealers could not afford to do without an Inclined Sounding Board cabinet of similar appearance this season. Here it is! Modernized and up-to-the-minute! Choice, straight-grained Walnut top and side panels, handsomely-figured Butt Walnut instrument panel, delicate inlays and mouldings, curved pilasters—all carefully chosen for beauty and contrast of grain—combine to give this cabinet exquisite charm. Distinctly smart and modern, and hand-rubbed to a soft, velvety finish, it possesses the priceless ability to blend perfectly into any home. Think of it! A 660X in a better 16X cabinet and selling for 20% less than the 16X!

Dimensions

25½" Wide

40⅞" High

13⅞" Deep

PHILCO 660L . \$150

Complete with scientifically designed
Philco All-wave Aerial . . . \$155

Charming "All-Period" furniture design truly indicative of fine music. Matched cross-fire Mahogany is enhanced by inlaid beading and a bow front; off-set panels give this cabinet outstanding classic beauty. It is hand-rubbed throughout. Blends perfectly with other furniture of any period except Moderne. By pressing a release button, the lid is automatically raised, revealing the concealed instrument panel—a new Philco feature.

Dimensions

37¼" Wide 31⅜" High 16½" Deep



Super Class A

AMERICAN AND FOREIGN RECEIVER

None of the features listed below is important unless all of the features have been designed to match each other to achieve a Balanced Unit Whole. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

MAJOR TONE FEATURES

Super Class A—Power Driven Audio System—10 Watts

Reception without distortion at all usable volumes. A vast reservoir of power to accommodate the volume range of a symphony orchestra from pianissimo to fortissimo.

Philco Inclined Sounding Board

- A. The incline directs the high notes (treble) up to your ears, preserving the sparkle and brilliance of the original.
- B. The large sounding board area faithfully reproduces the low notes (bass) thus preserving the depth and sonority of the original.

Result: Clear, life-like reception, as if the artists were present "in person."

Program Control

To adjust the radio to receive each program at its best.

- A. Mellow—American Stations.
- B. Brilliant—American Stations.
- C. Normal—Foreign Stations.
- D. Noise-Reducing—Foreign Stations.

Oversize Philco Electro-Dynamic Speaker

Exclusive Philco Moving Coil gives faithful response from bass to treble.

Live Rubber Condenser Mounting

Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

Automatic Bass Compensation

To compensate for the lessened ability of the normal ear to hear the low notes (bass) in true proportion at ordinary low room volumes, Philco Bass Compensation automatically brings up the bass as volume is turned down.

Shadow Tuning

For perfect tone you must have perfect tuning. Philco Shadow Tuning shows you visually when each station is tuned-in perfectly.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit

Through the scientific balancing of each unit with all others, Philco engineers have raised the All-wave performance of the superheterodyne circuit to new heights of perfection.

Non-Radiating

Built-in filter prevents radiated interference in other nearby sets.

10 Philco High Efficiency Tubes. Types—78, 76, 78, 42, 42, 77, 78, 75, 42, 80

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

Power Line Noise Rejectors

Keep power line noises out of the radio.

Rigid Chassis Base

Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded

Both circuits and tubes metal shielded throughout to attain maximum amplification.

Safe from Fire and Shock

Built to conform in every respect to the Underwriters' Safety Standards.

MAJOR ALL-WAVE FEATURES

Broadcast Band Coverage

Both Daylight and Night-time Foreign and American Short-Wave Broadcasts . . . Both Police Call Bands, Aircraft, Ship and Amateur Bands . . . Standard American Band . . . U. S. Government Weather Forecasts.

Glowing Arrow Wave Band Indicator

Glowing arrow shows visually the band in use.

Certain variations in tone features naturally exist between inclined sounding board models and other furniture models because of the larger sounding board area in the "X" cabinets.

Full Automatic Volume Control

To counteract fading of distant stations and blasting of local stations.

Precision Radio Dial

Station settings are spaced farther apart on this dial. Result: The easiest, most precise tuning in all radio.

Two-Speed Planetary Drive Station Selector

- A. Fast Speed for swift turning.
- B. Slow Speed for precision tuning of short-wave stations. 80 to 1 ratio.

Noise Excluding Signal Amplifier (Robot Tuner)

Automatically amplifies the station signal while rejecting interference and image noise.

Triple Selector System

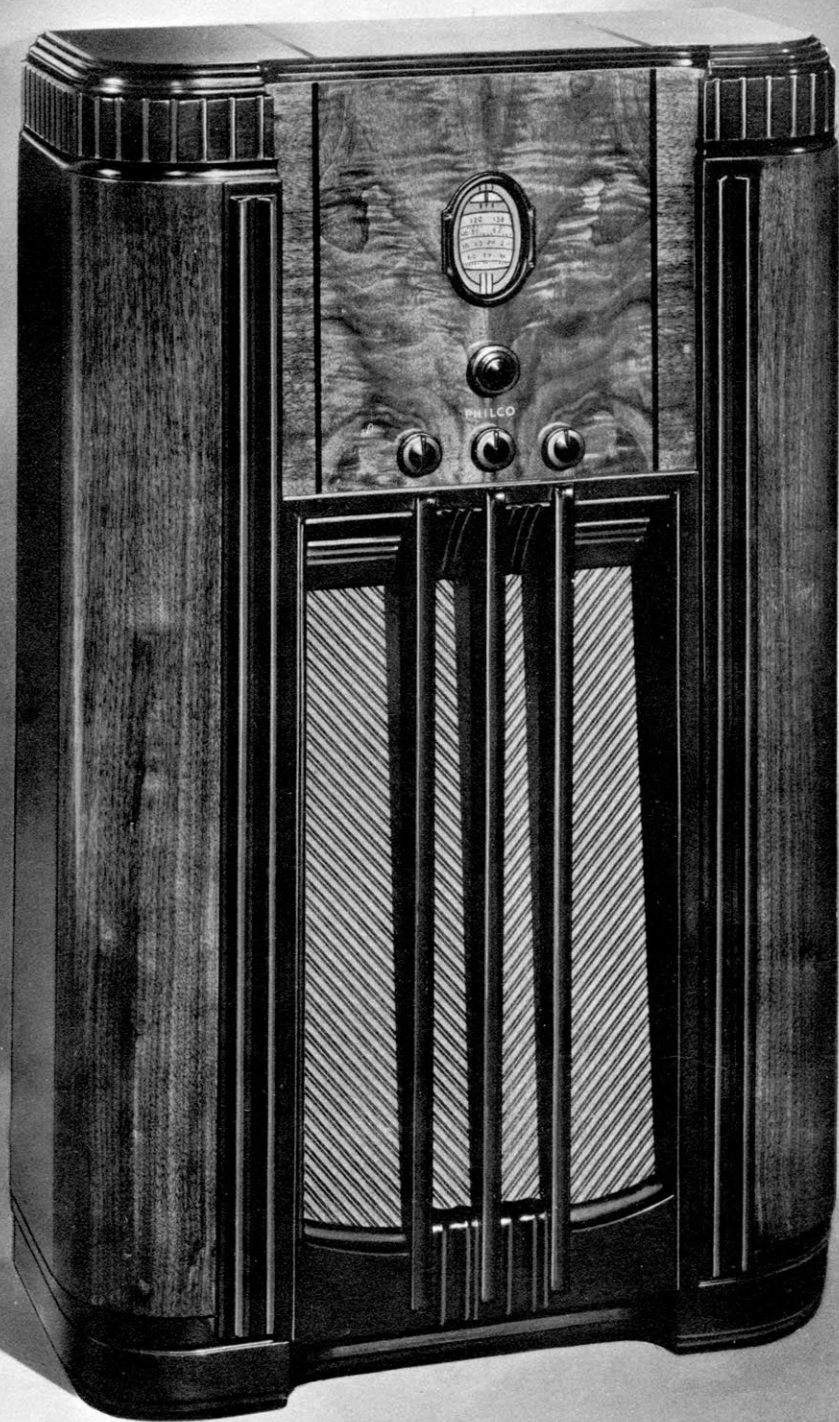
Automatically rejects interfering stations and gives hairline selectivity on both American and Foreign broadcasts.

Automatic Aerial Selector

To span oceans requires a scientifically designed All-wave aerial system. Used with the Philco All-wave aerial, the built-in Aerial Selector automatically switches in the exact electrical values needed to maintain maximum power on each wave band. In effect, a separate aerial for each band.

To get out of this receiver all the performance which has been built in, be sure to equip it with a Philco All-wave Aerial.

Philco 660



69,510 SOLD
with ONE band in 1933-34

94,079 SOLD
with TWO bands in 1934-35

200,000
with FOUR bands in 1935-36

And in Spite of the Extra Cost of Four Bands, the Famous Philco Super Class A Audio System is Still There!

PHILCO 650X
\$100

Complete with scientifically designed Philco All-wave Aerial . . . \$105

If the 118X cabinet was popular, how can we hold this 650X down? A symphony in gorgeously-grained Walnut—a superb cabinet creation! Slanting instrument panel of rare Butt Walnut set off by handsome black inlay—curved pilasters of lighter tone—moulding and base of darker tone—hand-rubbed to a rich, lustrous finish—all combine to make this Inclined Sounding Board cabinet a thing of beauty to all who see it, a prized possession of all who own it.

Dimensions
24³/₈" Wide 40" High 11¹/₈" Deep

PHILCO 650B \$79.50

Complete with scientifically designed Philco All-wave Aerial . . . \$84.50

There's a wealth of smartness and style in this Baby Grand cabinet! The instrument panel of beautifully figured East Indian Laurel is handsomely set off by fluted pilasters of darker tone. Exceptionally attractive double curved end panels give this cabinet a distinctive style. Hand-rubbed to a soft, lustrous finish.

Dimensions
15⁵/₈" Wide 20¹/₄" High 10¹/₈" Deep



Super Class A

AMERICAN AND FOREIGN RECEIVER

None of the features listed below is important unless all of the features have been designed to match each other to achieve a Balanced Unit Whole. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

MAJOR TONE FEATURES

Super Class A—Power-Driven Audio System—10 Watts

Reception without distortion at all usable volumes. A vast reservoir of power to accommodate the volume range of a symphony orchestra from pianissimo to fortissimo.

Philco Inclined Sounding Board

- A. The incline directs the high notes (treble) up to your ears, preserving the sparkle and brilliance of the original.
- B. The large sounding board area faithfully reproduces the low notes (bass) thus preserving the depth and sonority of the original.

Result: Clear, life-like reception, as if the artists were present "in person."

Program Control

To adjust the radio to receive each program at its best.

- A. Mellow—American Stations.
- B. Brilliant—American Stations.
- C. Normal—Foreign Stations.
- D. Noise-Reducing—Foreign Stations.

Oversize Philco Electro-Dynamic Speaker

Exclusive Philco Moving Coil gives faithful response from bass to treble.

Live Rubber Condenser Mounting

Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

Automatic Bass Compensation

To compensate for the lessened ability of the normal ear to hear the low notes (bass) in true proportion at ordinary low room volumes, Philco Bass Compensation automatically brings up the bass as volume is turned down.

Shadow Tuning

For perfect tone you must have perfect tuning. Philco Shadow Tuning shows you visually when each station is tuned-in perfectly.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit

Through the scientific balancing of each unit with all others, Philco engineers have raised the All-wave performance of the superheterodyne circuit to new heights of perfection.

Non-Radiating

Built-in filter prevents radiated interference in other nearby sets.

8 Philco High Efficiency Tubes. Types—78, 78, 42, 42, 6A7, 75, 42, 80

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

Power Line Noise Rejectors

Keep power line noises out of the radio.

Rigid Chassis Base

Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded

Both circuits and tubes metal shielded throughout to attain maximum amplification.

Safe From Fire and Shock

Built to conform in every respect to the Underwriters' Safety Standards.

MAJOR ALL-WAVE FEATURES

Broadcast Band Coverage

Both Daylight and Night-time Foreign and American Short-Wave Broadcasts . . . Both Police Call Bands, Aircraft, Ship and Amateur Bands . . . Standard American Band . . . U. S. Government Weather Forecasts.

Wave Band Indicator

Position of lower center control shows wave band in use.

Full Automatic Volume Control

To counteract fading of distant stations and blasting of local stations.

Precision Radio Dial

Station settings are spaced farther apart on this dial. Result: The easiest, most precise tuning in all radio.

Two-Speed Planetary Drive Station Selector

- A. Fast Speed for swift turning.
- B. Slow Speed for precision tuning of short-wave stations. 80 to 1 ratio.

Noise Excluding Signal Amplifier (Robot Tuner)

Automatically amplifies the station signal while rejecting interference and image noise.

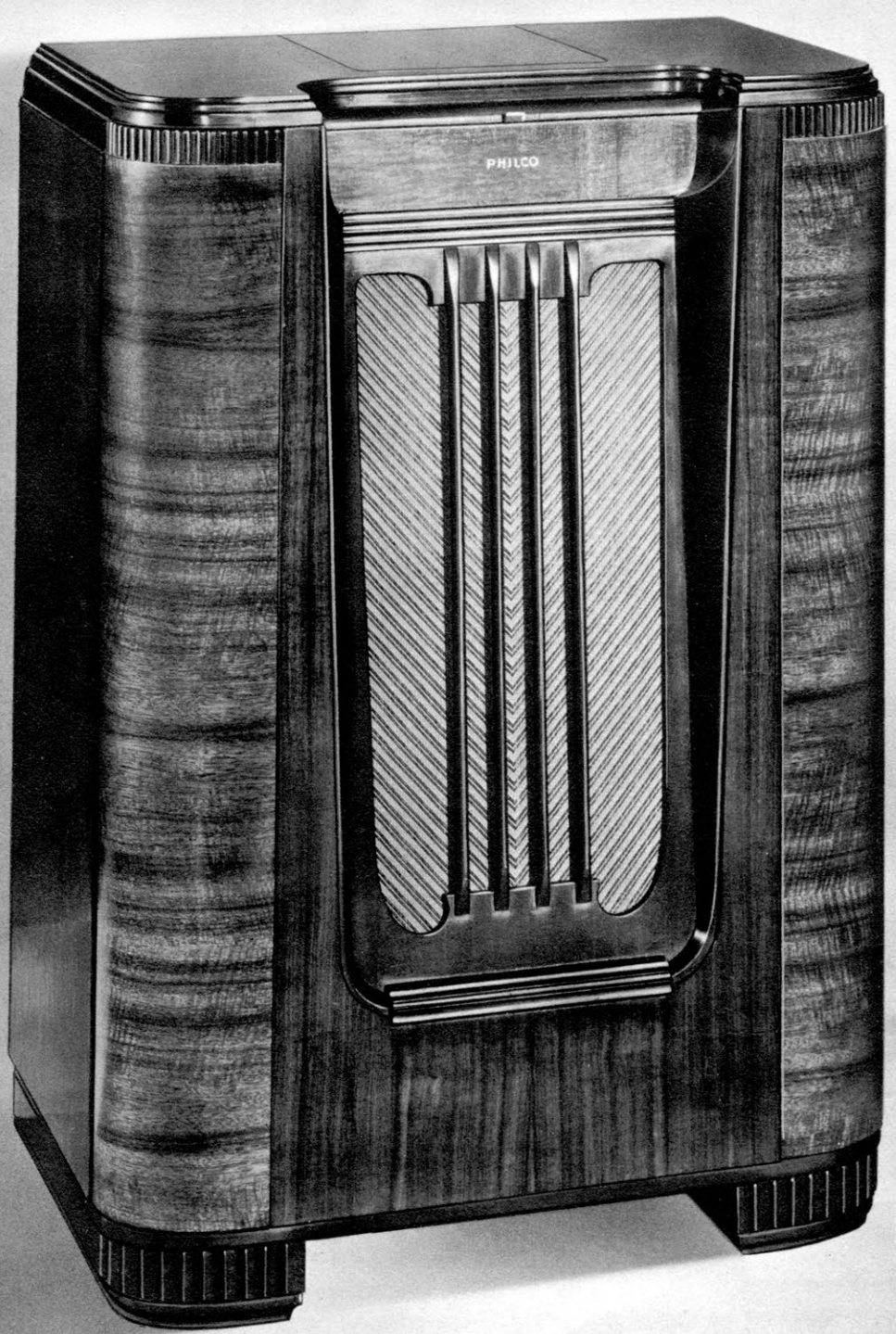
Automatic Aerial Selector

To span oceans requires a scientifically designed All-wave aerial system. Used with the Philco All-wave Aerial, the built-in Aerial Selector automatically switches in the exact electrical values needed to maintain maximum power on each wave band. In effect, a separate aerial for each band.

Certain variations in tone features naturally exist between table and inclined sounding board models because of the much larger sounding board area in the "X" Models.

To get out of this receiver all the performance which has been built in, be sure to equip it with a Philco All-wave Aerial.

Philco 650



PHILCO 650MX

\$125

Complete with scientifically designed Philco All-wave Aerial . . . \$130

FOR FEATURE DESCRIPTION SEE PAGE 11

Philco presents in this splendid modern design a new advance in radio cabinets! It is different and appealing! Just press the release button and the lid is automatically raised, revealing the concealed instrument panel. Rare, costly woods and curved pilasters are used in this, a most unusual cabinet. Fashioned of figured East Indian Laurel with contrasting areas of plain Laurel, it offers one of the most striking cabinet creations in the entire Philco line. The hand-rubbed finish brings out perfectly the sparkling beauty of its fine, rich color.

Dimensions
24⁵/₈" Wide 35¹/₂" High 14³/₄" Deep

PHILCO 650RX \$137.50

Complete with scientifically designed Philco All-wave Aerial . . . \$142.50

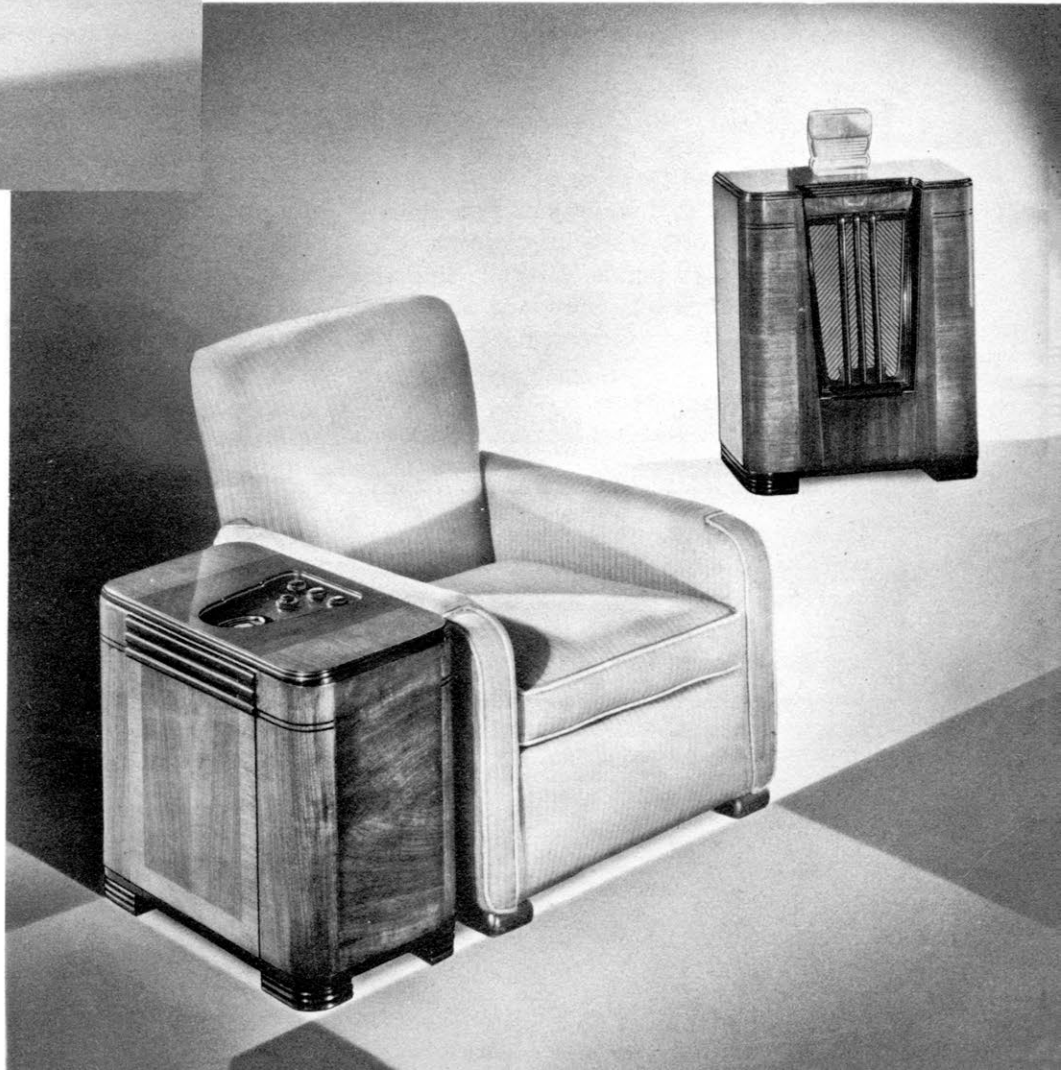
FOR FEATURE DESCRIPTION SEE PAGE 11

Strikingly smart! Conservatively modern! Exquisitely beautiful! That describes in brief this magnificent Remote Control receiver. To attain the dignity and elegance, choice Walnut in contrasting shades and grainings is used throughout. Matched paneling predominates and curved pilasters give charming grace and beauty.

From one's favorite armchair, programs from all over the world, via short-wave, or any program here at home, may be tuned in through the magic of Philco Remote Control. Only Philco has brought this luxury within the reach of everyone! Philco's Electrical Remote Control provides the ultimate in convenience, and with no moving parts. Change stations—adjust volume—control tone—by a mere twist of the fingers; all the glorious beauty of Philco tone comes to you at its best from the sound cabinet across the room.

Dimensions

Speaker Unit: 24" Wide 30¹/₈" High 11¹³/₁₆" Deep
Tuning Unit: 24" Wide 21" High 13" Deep



PHILCO 650H \$125

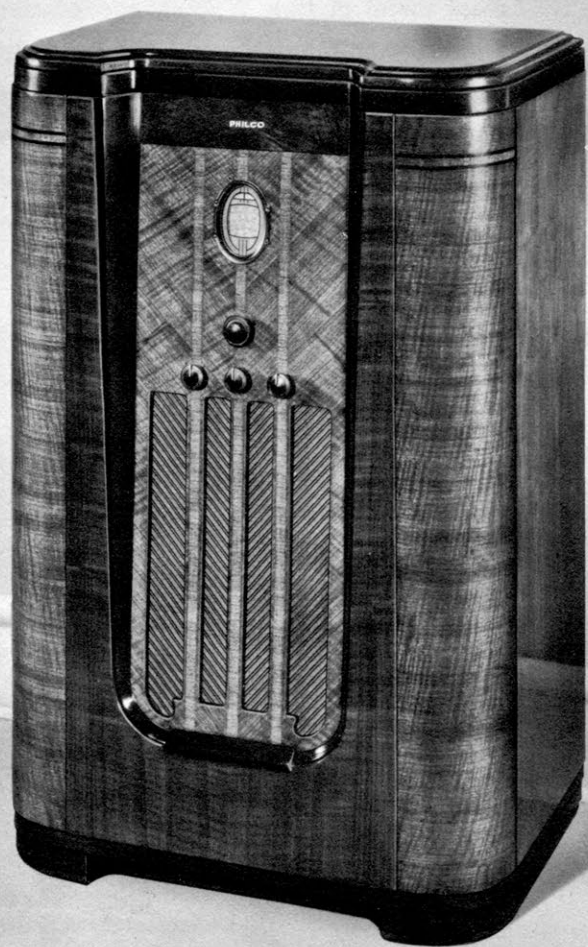
Complete with scientifically designed
Philco All-wave Aerial . . . \$130

FOR FEATURE DESCRIPTION SEE PAGE 11

A superb cabinet of "All-Period" furniture design. A triumph—not alone because of its grace and beauty of line and its lovely grained woods and contrasting inlays—but because it combines all periods of furniture without being definitely of any one period. Thus, it blends perfectly into any home, regardless of its decorative scheme (except Moderne). Cross-fire Mahogany beautifully matched on its bow front and curved ends, is high-lighted and emphasized by a wealth of delicate inlays and marquetry. Hand-rubbed to a rich brown tone, it is an exquisite cabinet creation! A slight pressure on the release button automatically raises the lid and reveals the concealed instrument panel.

Dimensions

28 $\frac{3}{8}$ " Wide 36 $\frac{1}{8}$ " High 15 $\frac{1}{8}$ " Deep



PHILCO 650PX RADIO-PHONOGRAPH \$175

FOR FEATURE DESCRIPTION SEE PAGE 11

(Complete with scientifically designed
Philco All-wave Aerial . . . \$180)

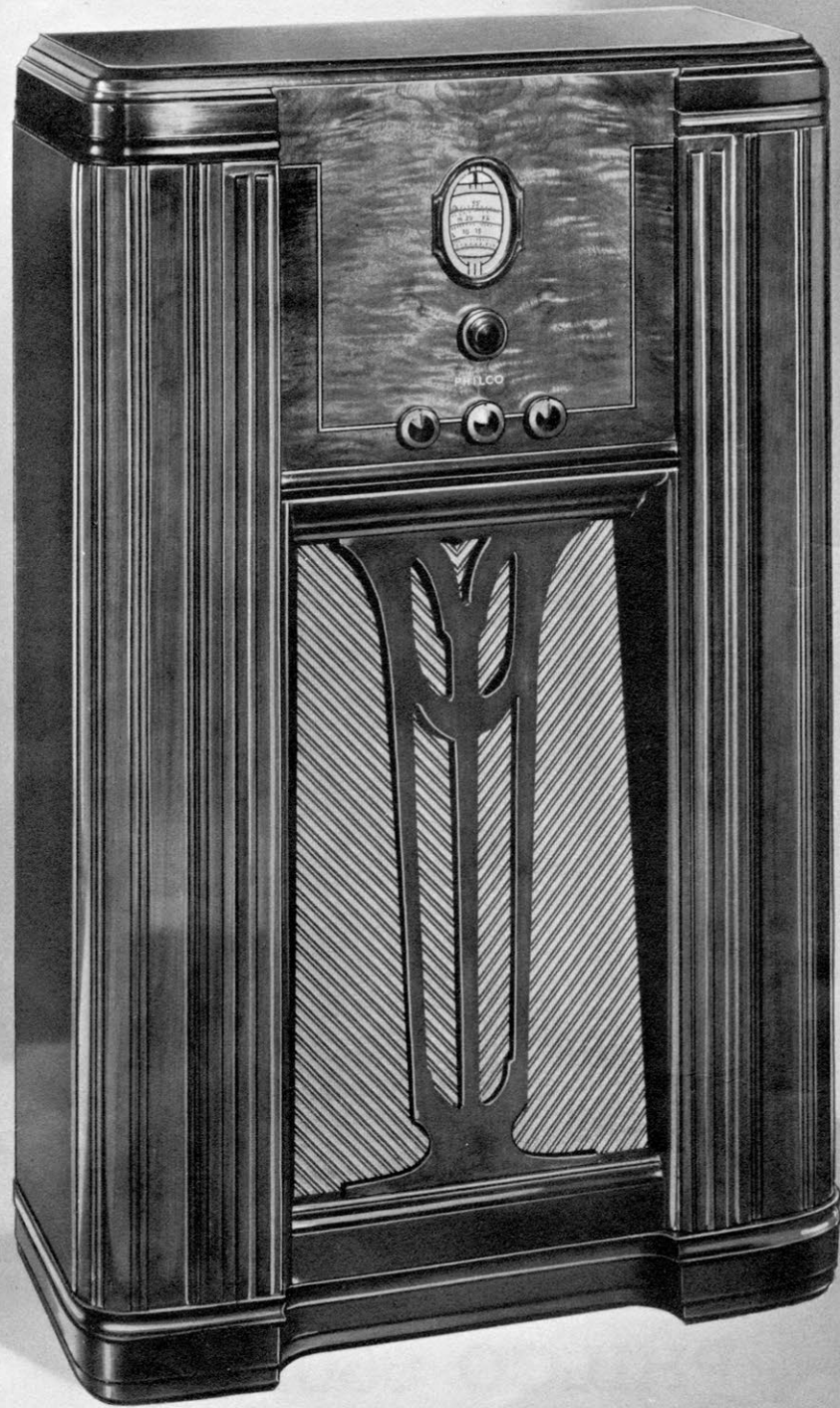
A masterpiece of master furniture craftsmen! Never before a radio-phonograph such as this! The famous Inclined Sounding Board in a cabinet that actually thrills with its perfection of line, the rare beauty of its choice woods.

The Philco 650 radio chassis is scientifically combined with an electric pick-up and phonograph motor of the finest grade available. Designed for either standard or "long-playing" records.

Dimensions

26" Wide 41 $\frac{3}{8}$ " High 17" Deep

Philco 650



Imagine!

The U. S. Government
Weather Forecasts and
Every Other Broadcast
Service on the Air . . .

For \$89.50!

PHILCO 640X \$89.50

Complete with scientifically designed
Philco All-wave Aerial . . . \$94.50

Another striking example of Philco's determination to make its 1936 cabinets the most beautiful ever designed! This distinguished Inclined Sounding Board model is featured by a gorgeously figured instrument panel of Butt Walnut, accentuated and made still more beautiful through the use of black and gold inlay. Fluted pilasters provide contrast to the darker toned top and base. Hand-rubbed finish.

Dimensions
24 1/4" Wide 39 3/8" High 11" Deep

PHILCO 640B . \$69.50

Complete with scientifically designed
Philco All-wave Aerial . . . \$74.50

Double curved end panels give this Baby Grand cabinet a new shape that is distinctive and exceptionally attractive. Dark toned fluted pilasters frame an instrument panel of beautifully figured East Indian Laurel. A soft, hand-rubbed finish adds richness and charm.

Dimensions
15 5/8" Wide 20 1/4" High 10 1/8" Deep



Push-Pull

AMERICAN AND FOREIGN RECEIVER

None of the features listed below is important unless all of the features have been designed to match each other to achieve a Balanced Unit Whole. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

MAJOR TONE FEATURES

Push-Pull Audio System—7 Watts

Two audio tubes in Push-Pull arrangement, producing more than double the power output and providing large reserve to prevent distortion of both music and speech.

Philco Inclined Sounding Board

- The incline directs the high notes (treble) up to your ears, preserving the sparkle and brilliance of the original.
- The large sounding board area faithfully reproduces the low notes (bass) thus preserving the depth and sonority of the original.

Result: Clear, life-like reception, as if the artists were present "in person."

Program Control

To adjust the radio to receive each program at its best.

- Mellow—American Stations.
- Brilliant—American Stations.
- Normal—Foreign Stations.
- Noise-reducing—Foreign Stations.

Oversize Philco Electro-Dynamic Speaker

Exclusive Philco Moving Coil gives faithful response from bass to treble.

Live Rubber Condenser Mounting

Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

Automatic Bass Compensation

To compensate for the lessened ability of the normal ear to hear the low notes (bass) in true proportion at ordinary low room volumes, Philco Base Compensation automatically brings up the bass as volume is turned down.

Shadow Tuning

For perfect tone you must have perfect tuning. Philco Shadow Tuning shows you visually when each station is tuned in perfectly.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit

Through the scientific balancing of each unit with all others, Philco engineers have raised the all-wave performance of the superheterodyne circuit to new heights of perfection.

Non-Radiating

Built-in filter prevents radiated interference in other nearby sets.

7 Philco High Efficiency Tubes. Types—78, 78, 42, 80, 6A7, 85, 42

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

Power Line Noise Rejectors

Keep power line noises out of the radio.

Rigid Chassis Base

Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded

Both circuits and tubes metal shielded throughout to attain maximum amplification.

Safe from Fire and Shock

Built to conform in every respect to the Underwriters' Safety Standards.

MAJOR ALL-WAVE FEATURES

Broadcast Band Coverage

Both Daylight and Night-time Foreign and American Short-Wave Broadcasts . . . Both Police Call Bands, Aircraft, Ship and Amateur Bands . . . Standard American Band . . . U. S. Government Weather Forecasts.

Wave Band Indicator

Position of lower center control shows wave band in use.

Full Automatic Volume Control

To counteract fading of distant stations and blasting of local stations.

Precision Radio Dial

Station settings are spaced farther apart on this dial. Result: The easiest, most precise tuning in all radio.

Two-Speed Planetary Drive Station Selector

- Fast Speed for swift turning.
- Slow Speed for precision tuning of short-wave stations. 80 to 1 ratio.

Noise Excluding Signal Amplifier (Robot Tuner)

Automatically amplifies the station signal while rejecting interference and image noise.

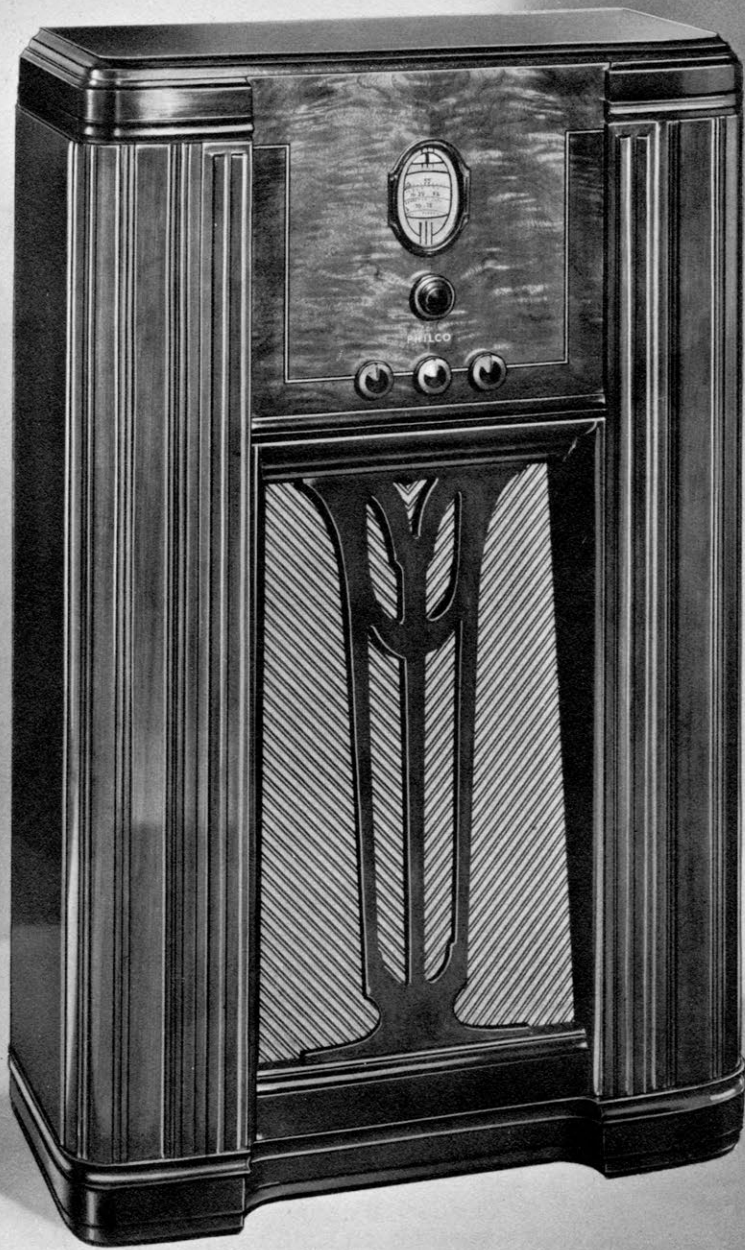
Automatic Aerial Selector

To span oceans requires a scientifically designed All-wave aerial system. Used with the Philco All-wave Aerial, the built-in Aerial Selector automatically switches in the exact electrical values needed to maintain maximum power on each wave band. In effect, a separate aerial for each band.

Certain variations in tone features naturally exist between table and inclined sounding board models because of the much larger sounding board area in the "X" Models.

To get out of this receiver all the performance which has been built in, be sure to equip it with a Philco All-wave Aerial.

Philco 640



THINK OF IT!

Only \$75 For a Real Philco
Inclined Sounding Board Model
—Plus Short-Wave Reception
From All the World!

PHILCO 630x . . \$75

Complete with scientifically designed
Philco All-wave Aerial \$80

The feature of this handsome Inclined Sounding Board model is its instrument panel. Gorgeously figured Butt Walnut is enhanced and beautified by rich black and gold inlays. Fluted pilasters contrast pleasingly with the dark toned top and base. Hand-rubbing gives a soft, velvety finish.

Dimensions

24 $\frac{1}{4}$ " Wide 39 $\frac{3}{8}$ " High 11" Deep



PHILCO 630B.. \$59.95

Complete with scientifically designed
Philco All-wave Aerial \$64.95

The exquisitely-grained instrument panel of center-matched Butt Walnut will be sure to make this Philco Baby Grand one of your most popular models. Vertical black inlay stripes accentuate its height. Double-curved end panels and fluted pilasters of contrasting tone. A most beautiful table model!

Dimensions

14 $\frac{3}{8}$ " Wide 19 $\frac{3}{8}$ " High 9 $\frac{1}{8}$ " Deep



PHILCO 630CSX . . . \$79.50

Complete with scientifically designed
Philco All-wave Aerial \$84.50

This handsome Chair-Side Philco is an ideal model for apartments and small rooms. The phantom illustration shows how the cabinet of fine straight-grained matched American Walnut can be placed by your chair for convenient operation. You tune-in American and Foreign programs and the Inclined Sounding Board directs all programs up to ear level.

Dimensions

23" Wide 22 $\frac{1}{8}$ " High 14 $\frac{7}{8}$ " Deep

Super Pentode

AMERICAN AND FOREIGN RECEIVER

None of the features listed below is important unless all of the features have been designed to match each other to achieve a Balanced Unit Whole. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

MAJOR TONE FEATURES

Super Pentode Audio System—5 Watts

Increased output to prevent distortion on loud musical and vocal passages within the full 5-watt power.

Philco Inclined Sounding Board

A. The incline directs the high notes (treble) up to your ears, preserving the sparkle and brilliance of the original.

B. The large sounding board area faithfully reproduces the low notes (bass) thus preserving the depth and sonority of the original.

Result: Clear, life-like reception, as if the artists were present "in person."

Tone Control

- A. Mellow—for American reception.
- B. Brilliant—for American reception.
- C. Noise-Reducing—for Foreign reception.

Oversize Philco Electro-Dynamic Speaker

Exclusive Philco Moving Coil gives faithful response from bass to treble.

Live Rubber Condenser Mounting

Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

Automatic Bass Compensation

To compensate for the lessened ability of the normal ear to hear the low notes (bass) in true proportion at ordinary low room volumes, Philco Bass Compensation automatically brings up the bass as volume is turned down.

Shadow Tuning

For perfect tone you must have perfect tuning. Philco Shadow Tuning shows you visually when each station is tuned-in perfectly.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit

Through the scientific balancing of each unit with all others, Philco engineers have raised the all-wave performance of the superheterodyne circuit to new heights of perfection.

Non-Radiating

Built-in filter prevents radiated interference in other nearby sets.

6 Philco High Efficiency Tubes. Types—78, 78, 42, 6A7, 75, 80

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

Power Line Noise Rejectors

Keep power line noises out of the radio.

Rigid Chassis Base

Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded

Both circuits and tubes metal shielded throughout to attain maximum amplification.

Safe from Fire and Shock

Built to conform in every respect to the Underwriters' Safety Standards.

MAJOR ALL-WAVE FEATURES

Broadcast Band Coverage

Both Daylight and Night-time Foreign and American Short-Wave Broadcasts . . . Both Police Call Bands, Amateur, Ship and Aircraft Bands . . . Standard American Band.

Wave Band Indicator

Position of lower center control shows wave band in use.

Full Automatic Volume Control

To counteract fading of distant stations and blasting of local stations.

Precision Radio Dial

Station settings are spaced farther apart on this dial. Result: The easiest, most precise tuning in all radio.

Two-Speed Gear Drive Station Selector

- A. Fast Speed for swift turning.
- B. Slow Speed for fine tuning of short-wave stations. 50 to 1 ratio.

Noise Excluding Signal Amplifier (Robot Tuner)

Automatically amplifies the station signal while rejecting interference and image noise.

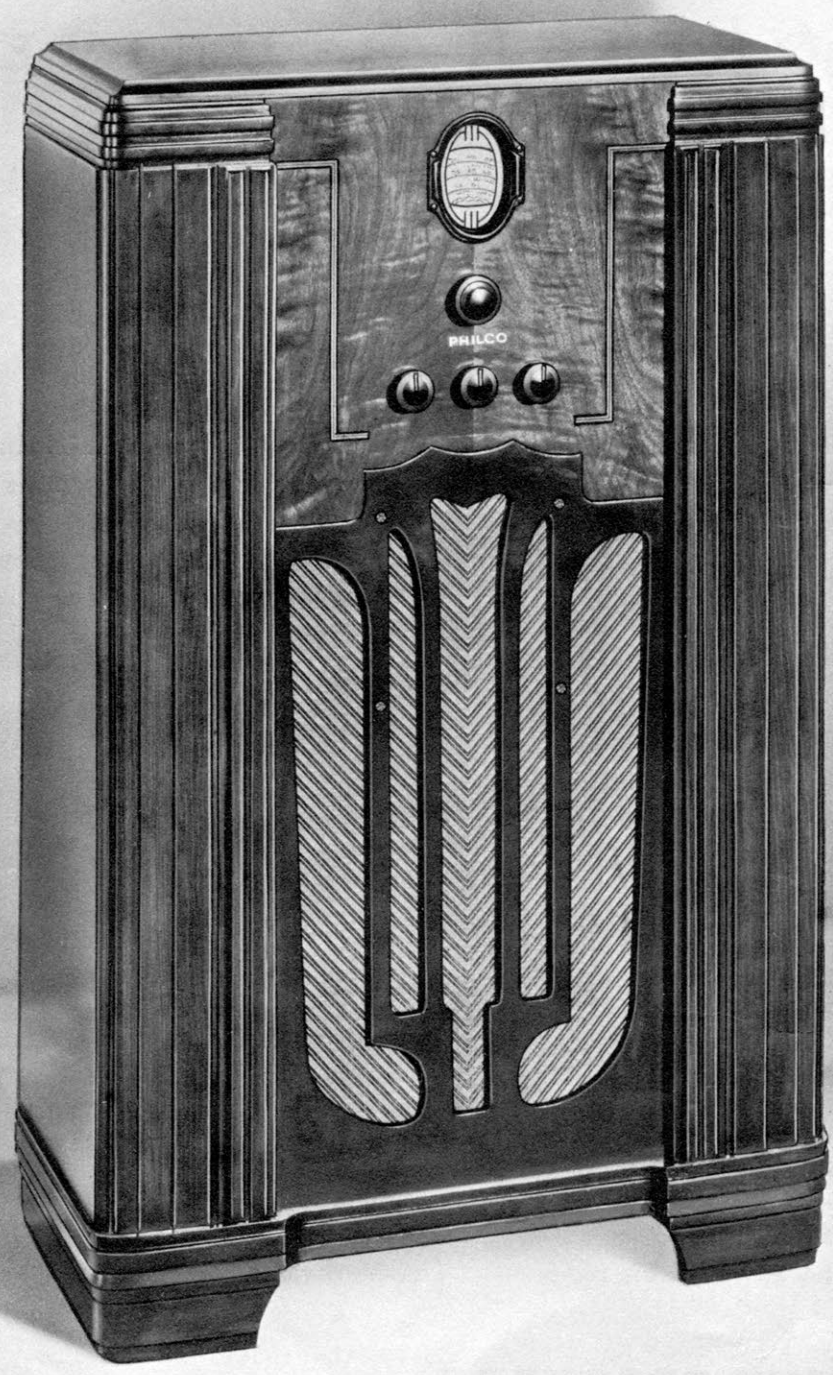
Automatic Aerial Selector

To span oceans requires a scientifically designed All-wave aerial system. Used with the Philco All-wave Aerial, the built-in Aerial Selector automatically switches in the exact electrical values needed to maintain maximum power on each wave band. In effect, a separate aerial for each band.

Certain variations in tone features naturally exist between table and inclined sounding board models because of the much larger sounding board area in the "X" Models.

To get out of this receiver all the performance which has been built in, be sure to equip it with a Philco All-wave Aerial.

Philco 630



LOOK!

North America, South America, Europe, Africa, Asia, Australia—In A FLOOR CABINET...
For \$65!

•
PHILCO 620F
\$65

Complete with scientifically designed Philco All-wave Aerial \$70

When one sees this cabinet for the first time, his eyes focus instinctively upon the gorgeous instrument panel, which is fashioned of most exquisitely-grained Butt Walnut. A fine inlay of light and dark toned Walnut enhances the beauty of this panel. Darker toned pilasters and base provide contrast and add to harmony of design. Satin-finished throughout, this cabinet will delight the lover of fine furniture.

Dimensions
23³/₈" Wide 38" High 11" Deep

PHILCO 620B \$49.95

Complete with scientifically designed Philco All-wave Aerial . . . \$54.95

Here is another superb treatment of Philco's handsome double-curve panel construction! Beautifully figured rotary cut Walnut instrument panel and delicately carved overlay pilasters of darker tone will win for this cabinet a host of admirers. A rich, satin finish enhances its striking beauty.

Dimensions
12⁷/₈" Wide 18⁵/₈" High 9" Deep



Pentode

AMERICAN AND FOREIGN RECEIVER

None of the features listed below is important unless all of the features have been designed to match each other to achieve a Balanced Unit Whole. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

MAJOR TONE FEATURES

Pentode Audio System—3 Watts

Pentode power. True, clear, undistorted tone on speech and music.

Standard Philco Electro-Dynamic Speaker

Exclusive Philco Moving Coil makes this speaker extremely responsive.

Tone Control

- A. Mellow—for American reception.
- B. Brilliant—for American reception.
- C. Noise-Reducing—for Foreign reception.

Live Rubber Condenser Mounting

Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

Automatic Bass Compensation

To compensate for the lessened ability of the normal ear to hear the low notes (bass) in true proportion at ordinary low room volumes, Philco Bass Compensation automatically brings up the bass as volume is turned down.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit

Through the scientific balancing of each unit with all others, Philco engineers have raised the all-wave performance of the superheterodyne circuit to new heights of perfection.

Non-Radiating

Built-in filter prevents radiated interference in other nearby sets.

Power Line Noise Rejectors

Keep power line noises out of the radio.

6 Philco High Efficiency Tubes. Types—78, 78, 42, 6A7, 75, 80

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

Rigid Chassis Base

Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded

Both circuits and tubes metal shielded throughout to attain maximum amplification.

Safe from Fire and Shock

Built to conform in every respect to the Underwriters' Safety Standards.

MAJOR ALL-WAVE FEATURES

Broadcast Band Coverage

Both Daylight and Night-time Foreign and American Short-Wave Broadcasts . . . Both Police Call Bands, Amateur, Ship and Aircraft Bands . . . Standard American Band.

Wave Band Indicator

Position of lower center control shows wave band in use.

Full Automatic Volume Control

To counteract fading of distant stations and blasting of local stations.

Precision Radio Dial

Station settings are spaced farther apart on this dial. Result: The easiest, most precise tuning in all radio.

Two-Speed Gear Drive Station Selector

- A. Fast Speed for swift turning.
- B. Slow Speed for fine tuning of short-wave stations. 50 to 1 ratio.

Noise Excluding Signal Amplifier (Robot Tuner)

Automatically amplifies the station signal while rejecting interference and image noise.

Automatic Aerial Selector

To span oceans requires a scientifically designed All-wave aerial system. Used with the Philco All-wave Aerial, the built-in Aerial Selector automatically switches-in the exact electrical values needed to maintain maximum power on each wave band. In effect, a separate aerial for each band.

Certain variations in tone features naturally exist between table and furniture models because of the much larger sounding board area in the larger models.

To get out of this receiver all the performance which has been built in, be sure to equip it with a Philco All-wave Aerial.

Philco 620



**EVEN IF YOU NOW
HAVE DIRECT
CURRENT—**

**Here Is An AC-DC Philco—
Brings In The World!**

PHILCO 611F
\$57.50

Complete with scientifically designed
Philco All-wave Aerial . . . \$62.50

Dark toned base and pilasters serve as a harmonious contrast to the richly figured Butte Walnut instrument panel of this newest Console. Fine inlays of light and dark toned Walnut accentuate the natural beauty of the panel itself. A cabinet whose symmetry of line and boldness of design will delight all who see it. Satin-finished.

Dimensions

23 $\frac{3}{8}$ " Wide 38" High 11" Deep

PHILCO 611B . . . \$45

Complete with scientifically designed
Philco All-wave Aerial . . . \$50

A distinctive Baby Grand cabinet in rich toned cross-fire Mahogany, with double curved end panel. The soft, satin-finish of this unusually attractive table model makes it a worthy possession in any home.



A. C.—D. C.

AMERICAN AND FOREIGN RECEIVER

None of the features listed below is important unless all of the features have been designed to match each other to achieve a Balanced Unit Whole. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

MAJOR TONE FEATURES

Pentode Audio System

Pentode power. True, clear, undistorted tone on speech and music.

Standard Philco Electro-Dynamic Speaker

Exclusive Philco Moving Coil makes this speaker extremely responsive.

Tone Control

- A. Brilliant—for nearby reception.
- B. Noise Reducing—for distant reception.

Live Rubber Condenser Mounting

Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit

Through the scientific balancing of each unit with all others, Philco engineers have raised the All-wave performance of the superheterodyne circuit to new heights of perfection.

AC-DC Power Supply

Operates on either 115 volts AC or 115 volts DC.

Non-Radiating

Built-in filter prevents radiated interference in other nearby sets.

Power Line Noise Rejectors

Keep power line noise out of the radio.

5 Philco High Efficiency Tubes. Types—6A7, 75, 25Z5, 78, 43

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

Rigid Chassis Base

Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded

Both circuits and tubes metal shielded throughout to attain maximum amplification.

Safe from Fire and Shock

Built to conform in every respect to the Underwriters' Safety Standards.

MAJOR ALL-WAVE FEATURES

Broadcast Band Coverage

Both Daylight and Night-time Foreign and American Short-Wave Broadcasts . . . Both Police Call Bands, Amateur, Ship and Aircraft Bands . . . Standard American Band.

Wave Band Indicator

Position of lower center control shows wave band in use.

Full Automatic Volume Control

To counteract fading of distant stations and blasting of local stations.

Precision Radio Dial

Station settings are spaced farther apart on this dial. Result: The easiest, most precise tuning in all radio.

Automatic Aerial Selector

To span oceans requires a scientifically designed All-wave aerial system. Used with the Philco All-wave Aerial, the built-in Aerial selector automatically switches-in the exact electrical values needed to maintain maximum power on each wave band. In effect, a separate aerial for each band.

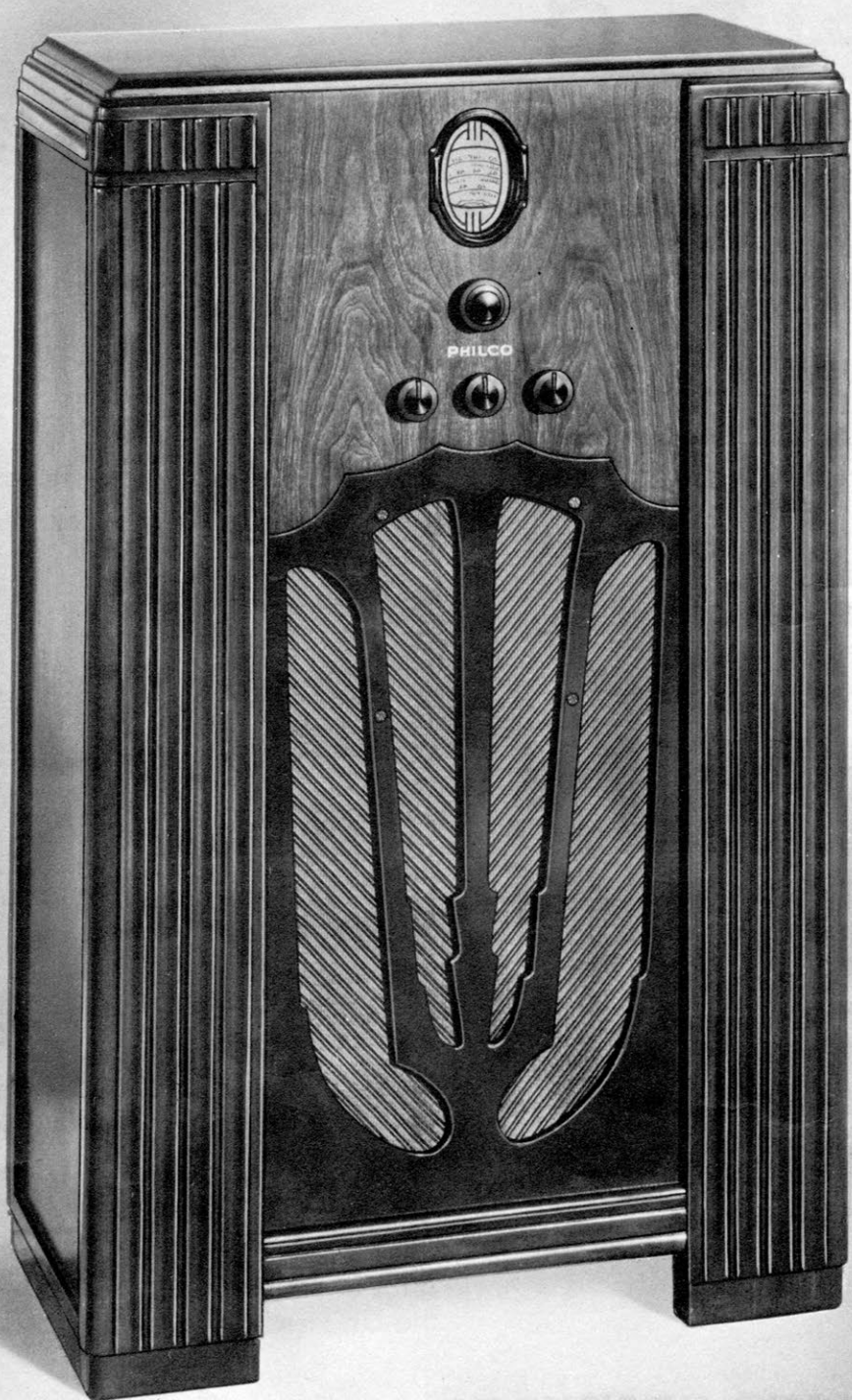
Certain variations in tone features naturally exist between table and furniture models because of the much larger sounding board area in the larger models.

Two-Speed Gear Drive Station Selector

- A. Fast Speed for swift turning.
- B. Slow Speed for fine tuning of short-wave stations. 50 to 1 ratio.

To get out of this receiver all the performance which has been built in, be sure to equip it with a Philco All-wave Aerial.

Philco 611



**AND NOW
AT \$49.95!**

A POWERFUL, SELECTIVE
3-BAND QUALITY PHILCO

**PHILCO 610F
\$49.95**

Complete with scientifically designed
Philco All-wave Aerial \$54.95

This handsome new Console has all the grace and beauty that distinguishes fine furniture! Every item—from the satin-finished American Walnut instrument panel to the fluted pilasters of dark toned straight-grained Walnut—reveals painstaking care in design and construction.

Dimensions
22⁷/₈" Wide 37¹/₂" High 10³/₄" Deep

PHILCO 610B \$39.95

Complete with scientifically designed
Philco All-wave Aerial \$44.95

Philco's distinctive double curved end panel finds one of its most attractive treatments in this handsome Baby Grand cabinet. It is further enhanced by the use of beautiful cross-fire Mahogany in two rich tones. Satin-finished throughout, it is a gem of table cabinet design.

Dimensions
12⁷/₈" Wide 16⁷/₈" High 8¹/₂" Deep



Pentode

AMERICAN AND FOREIGN RECEIVER

None of the features listed below is important unless all of the features have been designed to match each other to achieve a Balanced Unit Whole. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

MAJOR TONE FEATURES

Pentode Audio System—3 Watts

Pentode power. True, clear, undistorted tone on speech and music.

Standard Philco Electro-Dynamic Speaker

Exclusive Philco Moving Coil makes this speaker extremely responsive.

Tone Control

- A. Brilliant—for nearby reception.
- B. Noise-Reducing—for distant reception.

Live Rubber Condenser Mounting

Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit

Through the scientific balancing of each unit with all others, Philco engineers have raised the All-wave performance of the superheterodyne circuit to new heights of perfection.

Power Line Noise Rejectors

Keep power line noises out of the radio.

Rigid Chassis Base

Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Non-Radiating

Built-in filter prevents radiated interference in other nearby sets.

5 Philco High Efficiency Tubes. Types—6A7, 75, 80, 78, 42

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

Completely Shielded

Both circuits and tubes metal shielded throughout to attain maximum amplification.

Safe From Fire and Shock

Built to conform in every respect to the Underwriters' Safety Standards.

MAJOR ALL-WAVE FEATURES

Broadcast Band Coverage

Both Daylight and Night-time Foreign and American Short-Wave Broadcasts . . . Both Police Call Bands, Amateur, Ship and Aircraft Bands . . . Standard American Band.

Full Automatic Volume Control

To counteract fading of distant stations and blasting of local stations.

Automatic Aerial Selector

To span oceans requires a scientifically designed All-wave aerial system. Used with the Philco All-wave Aerial, the built-in Aerial Selector automatically switches-in the exact electrical values needed to maintain maximum power on each wave band. In effect, a separate aerial for each band.

Wave Band Indicator

Position of lower center control shows wave band in use.

Precision Radio Dial

Station settings are spaced farther apart on this dial. Result: The easiest, most precise tuning in all radio.

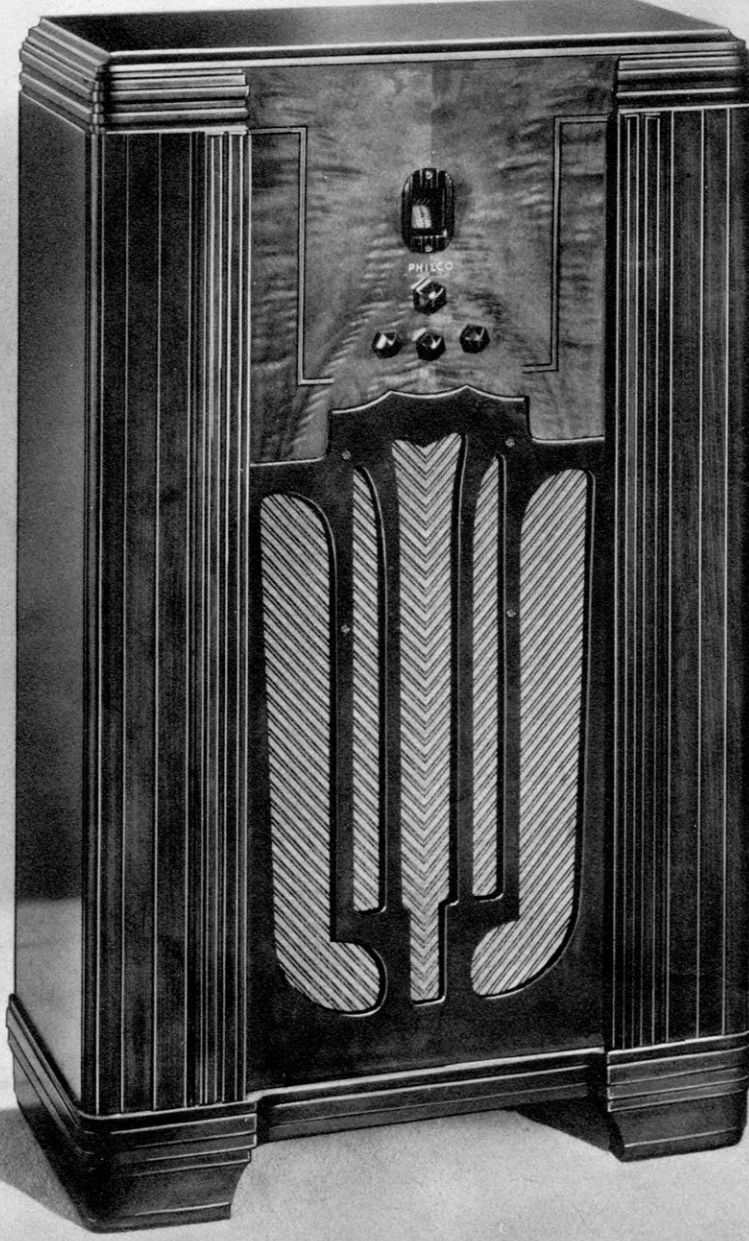
Two-Speed Gear Drive Station Selector

- A. Fast Speed for swift turning.
- B. Slow Speed for fine tuning of short-wave stations. 50 to 1 ratio.

Certain variations in tone features naturally exist between table and furniture models because of the much larger sounding board area in the larger models.

To get out of this receiver all the performance which has been built in, be sure to equip it with a Philco All-wave Aerial.

Philco 610



213,386
Model 89's Now
In Use!

The Standard Of Power
And Selectivity For
American Broadcast
Reception!

PHILCO 89F
\$50

Complete with scientifically designed
Philco All-wave Aerial \$55

The most striking feature of this full length,
floor type model is its gorgeous instru-
ment panel. Fashioned of exquisitely-
grained Butt Walnut, further enriched by
a fine inlay of light and dark Walnut,
this set stands out in bold relief. Pilasters
and base of darker tones provide an in-
teresting and harmonious contrast. Beau-
tiful satin finish.

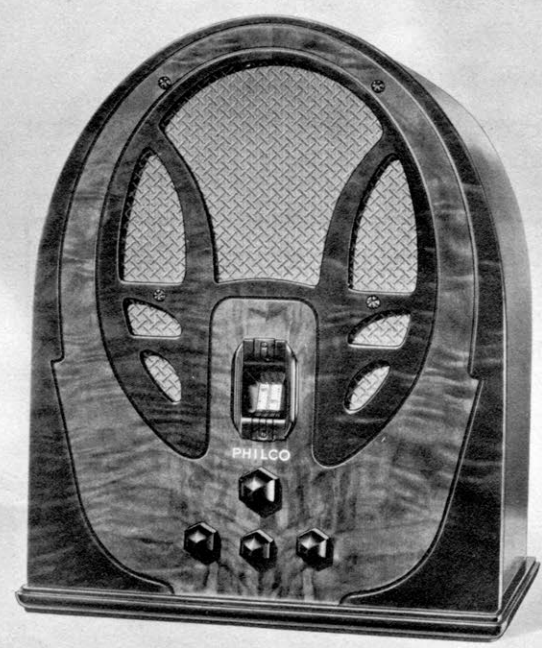
Dimensions
23³/₈" Wide 38" High 11" Deep

PHILCO 89B . . \$39.50

Complete with scientifically designed
Philco All-wave Aerial \$44.50

Here's dignity and good taste in a Baby Grand cabinet!
Using light and dark Butt Walnut for contrast, this truly
beautiful model possesses real charm. Its woods are care-
fully selected for grain and satin-finished throughout.

Dimensions
13¹/₈" Wide 16¹/₈" High 9³/₈" Deep



Pentode

A M E R I C A N R E C E I V E R

None of the features listed below is important unless all of the features have been designed to match each other to achieve a Balanced Unit Whole. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

MAJOR TONE FEATURES

Pentode Audio System—3 Watts

Pentode power. True, clear, undistorted tone on speech and music.

Standard Philco Electro-Dynamic Speaker

Exclusive Philco Moving Coil makes this speaker extremely responsive.

Tone Control

- A. Brilliant—for nearby reception.
- B. Noise Reducing—for distant reception.

Live Rubber Condenser Mounting

Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit

Through the scientific balancing of each unit with all others, Philco engineers have raised the performance of the superheterodyne circuit to new heights of perfection.

Non-Radiating

Built-in filter prevents radiated interference in other nearby sets.

Power Line Noise Rejectors

Keep power line noises out of the radio.

6 Philco High Efficiency Tubes. Types—77, 75, 44, 42, 44, 80

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

Rigid Chassis Base

Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded

Both circuits and tubes metal shielded throughout to attain maximum amplification.

Safe from Fire and Shock

Built to conform in every respect to the Underwriters' Safety Standards.

MAJOR TUNING FEATURES

Broadcast Band Coverage

Standard Broadcast Band . . . Both Police, many Aircraft and Amateur Stations.

Wave Band Switch

Convenient control to change wave bands.

Illuminated Station Recording Dial

Illuminated Drum Type Dial for quick, accurate tuning and ample space for recording call letters of favorite stations.

Tapered Volume Control

Even the strongest local stations can be tapered down to desired volume.

Noise-Excluding Signal Amplifier (Robot Tuner)

Automatically amplifies the station

signal while rejecting interference and image noise.

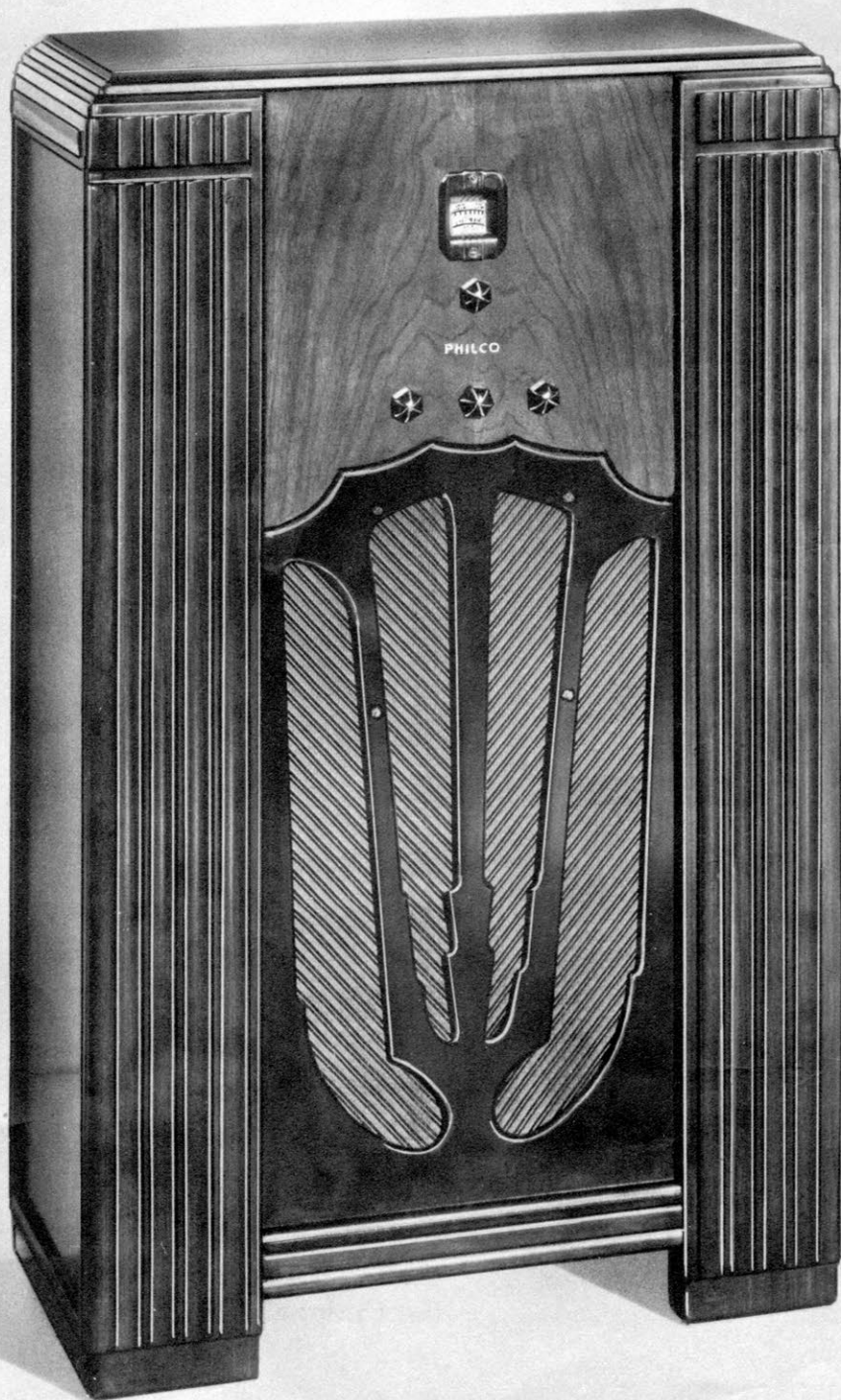
Full Automatic Volume Control

To counteract fading of distant stations and blasting of local stations.

Certain variations in tone features naturally exist between table and furniture models because of the much larger sounding board area in the larger models.

To get out of this receiver all the performance which has been built in, be sure to equip it with a Philco Aerial.

Philco 89



TODAY AS ALWAYS

Since Its Introduction--
**THE FASTEST SELLING
 MODEL IN THE WORLD!**
 Think Of It! Full Automatic Volume
 Control For \$42.50!

•

PHILCO 60F \$42.50

Complete with scientifically designed
 Philco All-wave Aerial \$47.50

Exquisite grace and beauty distinguish
 this handsome floor type cabinet. Soft,
 satin-finished instrument panel; speaker
 grille and fluted pilasters of darker toned
 straight-grain Walnut, reveal the pains-
 taking care of its designers. Fine furniture
 craftsmanship at its best!

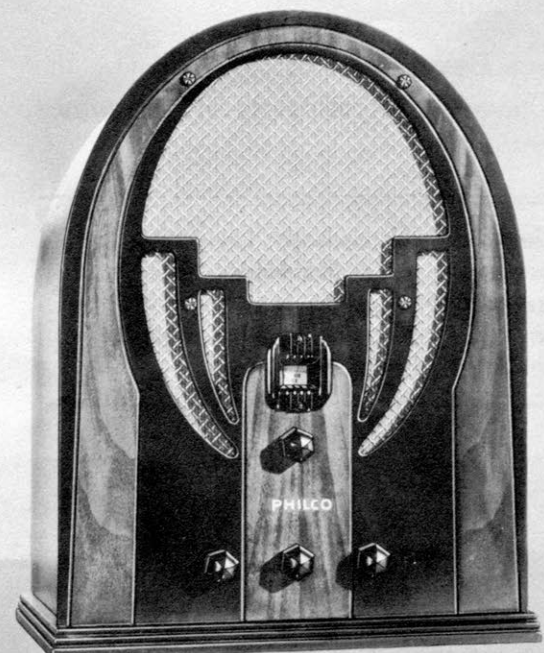
Dimensions
 22⁷/₈" Wide 37¹/₂" High 10³/₄" Deep

PHILCO 60B . . \$29.95

Complete with scientifically designed
 Philco All-wave Aerial \$34.95

This smart Baby Grand cabinet is made up of three con-
 trasting shades of Walnut, so arranged as to blend perfectly
 into a harmonious whole. The soft, satin finish makes it a
 prized possession of any owner.

Dimensions
 12³/₄" Wide 16¹/₄" High 8³/₄" Deep



Pentode

A M E R I C A N R E C E I V E R

None of the features listed below is important unless all of the features have been designed to match each other to achieve a Balanced Unit Whole. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

MAJOR TONE FEATURES

Pentode Audio System—3 Watts

Pentode power. True, clear, undistorted tone on speech and music.

Standard Philco Electro-Dynamic Speaker

Exclusive Philco Moving Coil makes this speaker extremely responsive.

Tone Control

- A. Brilliant—for nearby reception.
- B. Noise Reducing—for distant reception.

Live Rubber Condenser Mounting

Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit

Through the scientific balancing of each unit with all others, Philco engineers have raised the performance of the superheterodyne circuit to new heights of perfection.

Non-Radiating

Built-in filter prevents radiated interference in other nearby sets.

Power Line Noise Rejectors

Keep power line noises out of the radio.

5 Philco High Efficiency Tubes. Types—6A7, 42, 78, 80, 75

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

Rigid Chassis Base

Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded

Both circuits and tubes metal shielded throughout to attain maximum amplification.

Safe from Fire and Shock

Built to conform in every respect to the Underwriters' Safety Standards.

MAJOR TUNING FEATURES

Broadcast Band Coverage

Standard Broadcast Band . . . Both Police, many Aircraft and Amateur Stations.

Wave Band Switch

Convenient control to change wave bands.

Illuminated Station Recording Dial

Illuminated Dial for quick, accurate tuning and space for recording call letters of favorite stations.

Ball-Bearing Tuning

Smooth, accurate station tuning through ball-bearing reduction drive.

Tapered Volume Control

Even the strongest local stations can be tapered down to desired volume.

Full Automatic Volume Control

To counteract fading of distant stations and blasting of local stations.

Certain variations in tone features naturally exist between table and furniture models because of the much larger sounding board area in the larger models.

To get out of this receiver all the performance which has been built in, be sure to equip it with a Philco Aerial.

Philco 60

SAFE! BUILT TO MEET THE UNDERWRITERS' SAFETY STANDARDS!

1



(1) PHILCO 54s \$35

Complete with scientifically designed Philco All-wave Aerial \$40

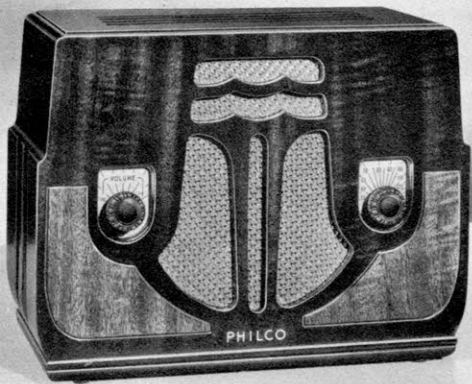
(1) PHILCO 59s \$29.95

Complete with scientifically designed Philco All-wave Aerial \$34.95

Striking design and beautiful combination of choice woods make this cabinet a desirable possession in any home! Tarso process selected Burl Walnut inlaid with Narrawood. Piano toning and hand rubbing give a soft, rich finish that finds favor with the most fastidious.

Dimensions
12⁵/₈" Wide 8⁷/₈" High 5¹/₈" Deep

2



(2) PHILCO 54c \$29.95

Complete with scientifically designed Philco All-wave Aerial \$34.95

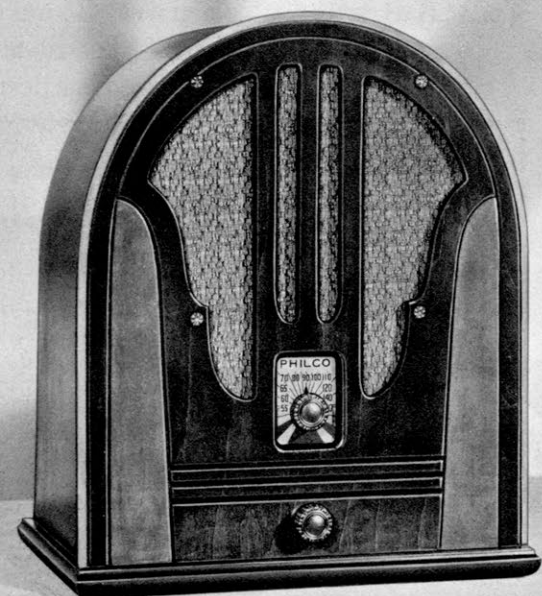
(2) PHILCO 59c \$25

Complete with scientifically designed Philco All-wave Aerial \$30

Here's new beauty in a compact! The natural loveliness of the wood is attractively brought out through the use of two-toned Mahogany on the face. A rich brown tone on top and ends matches with the darker portions of the Mahogany. Satin-finished.

Dimensions
11¹/₄" Wide 8⁵/₈" High 5³/₈" Deep

3



(3) PHILCO 84B \$20

Complete with scientifically designed Philco All-wave Aerial \$25

What a splendid cabinet for the person who wants smartness and style in the low-price field! Contrasting tones of medium and dark woods are accentuated most attractively by means of an ivory snap line. The rich satin finish gives it a character that's individual and appealing.

Dimensions
11⁷/₈" Wide 14¹/₈" High 8" Deep

AMERICAN RECEIVERS

None of the features listed below is important unless all of the features have been designed to match each other to achieve a Balanced Unit Whole. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

PHILCO 54—AMERICAN AC-DC RECEIVER

MAJOR TONE FEATURES

Pentode Audio System

Pentode power. True, clear, undistorted tone on speech and music.

Standard Philco Electro-Dynamic Speaker

Exclusive Philco Moving Coil makes this speaker extremely responsive.

Live Rubber Condenser Mounting

Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit

Through the scientific balancing of each unit with all others, Philco engineers have raised the performance of the superheterodyne circuit to new heights of perfection.

Non-Radiating

Built-in filter prevents radiated interference in other nearby sets.

Power Line Noise Rejector

Keeps power line noises out of the radio.

5 Philco High Efficiency Tubes.

Types—78, 75, 2525, 6A7, 43

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

AC DC Power Supply

Operates on either 115 volts AC or 115 volts DC.

Rigid Chassis Base

Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded

Both circuits and tubes metal shielded throughout to attain maximum amplification.

Safe from Fire and Shock

Built to conform in every respect to the Underwriters' Safety Standards.

MAJOR TUNING FEATURES

Broadcast Band Coverage

Standard Broadcast Band . . . Both Police, many Aircraft and Amateur Stations.

Wave-Band Switch

Convenient control to change wave bands.

Illuminated Tuning Dial

Illuminated Dial with large, readable, well-spaced numerals for quick, accurate tuning.

Ball-Bearing Tuning

Smooth, accurate station tuning through ball-bearing reduction drive.

Tapered Volume Control

Even the strongest local stations can be tapered down to desired volume.

Full Automatic Volume Control

To counteract fading of distant stations and blasting of local stations.

PHILCO 59—AMERICAN RECEIVER

MAJOR TONE FEATURES

Pentode Audio System

Pentode power. True, clear, undistorted tone on speech and music.

Standard Philco Electro-Dynamic Speaker

Exclusive Philco Moving Coil makes this speaker extremely responsive.

Live Rubber Condenser Mounting

Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit

Through the scientific balancing of each unit with all others, Philco engineers have raised the performance of the superheterodyne circuit to new heights of perfection.

Non-Radiating

Built-in filter prevents radiated interference in other nearby sets.

Power Line Noise Rejector

Keeps power line noises out of the radio.

4 Philco High Efficiency Tubes.

Types—77, 42, 77, 80

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

Rigid Chassis Base

Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded

Both circuits and tubes metal shielded throughout to attain maximum amplification.

Safe from Fire and Shock

Built to conform in every respect to the Underwriters' Safety Standards.

MAJOR TUNING FEATURES

Standard Broadcast and Police Calls

Extended Broadcast Band includes many Police and Amateur Stations.

Illuminated Tuning Dial

Illuminated Dial with large, readable, well-spaced numerals for quick, accurate tuning.

Ball-Bearing Tuning

Smooth, accurate station tuning through ball-bearing reduction drive.

Tapered Volume Control

Even the strongest local stations can be tapered down to desired volume.

PHILCO 84—AMERICAN RECEIVER

MAJOR TONE FEATURES

Pentode Audio System

Pentode power. True, clear, undistorted tone on speech and music.

Standard Philco Electro-Dynamic Speaker

Exclusive Philco Moving Coil makes this speaker extremely responsive.

Live Rubber Condenser Mounting

Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit

Through the scientific balancing of each unit with all others, Philco engineers have raised the performance of the superheterodyne circuit to new heights of perfection.

Non-Radiating

Built-in filter prevents radiated interference in other nearby sets.

Power Line Noise Rejector

Keeps power line noises out of the radio.

4 Philco High Efficiency Tubes.

Types—77, 42, 77, 80

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

Rigid Chassis Base

Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded

Both circuits and tubes metal shielded throughout to attain maximum amplification.

Safe from Fire and Shock

Built to conform in every respect to the Underwriters' Safety Standards.

MAJOR TUNING FEATURES

Standard Broadcast and Police Calls

Extended Broadcast Band includes many Police and Amateur Stations.

Illuminated Tuning Dial

Illuminated Dial with large, readable, well-spaced numerals for quick, accurate tuning.

Ball-Bearing Tuning

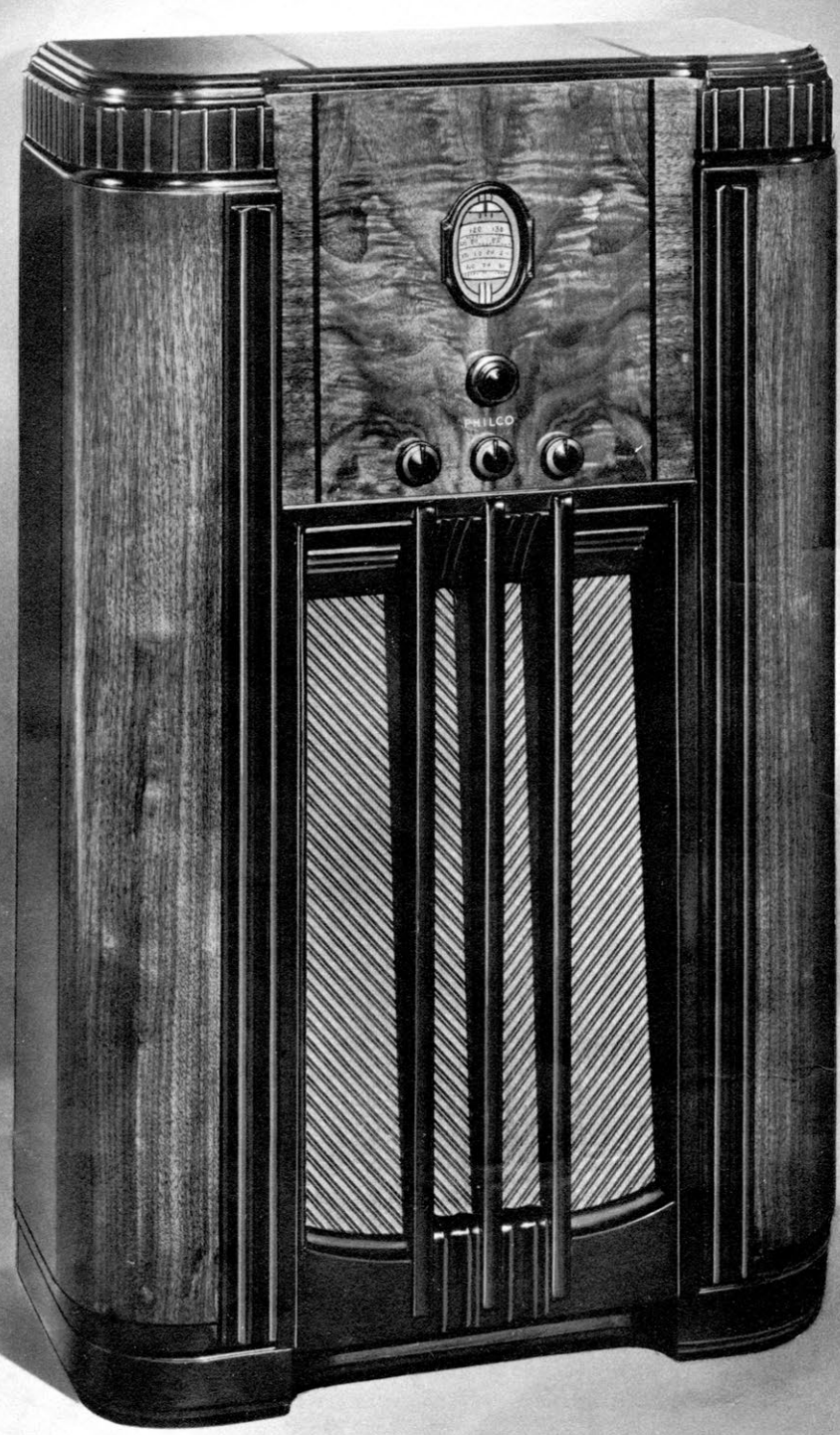
Smooth, accurate station tuning through ball-bearing reduction drive.

Tapered Volume Control

Even the strongest local stations can be tapered down to desired volume.

To get out of these receivers all the performance which has been built in, be sure to equip each of them with a Philco Aerial.

Philco 54-59-84



The Finest Battery Set Built!

Every Broadcast Service Including the New U. S. Weather Bureau Forecasts

PHILCO 643X

\$100 (with batteries)

Complete with scientifically designed Philco All-wave Aerial . . . \$105

An Inclined Sounding Board cabinet worthy of the finest battery-operated Philco ever built! The slanting instrument panel of rare Butt Walnut is smartly accentuated by handsome black inlays. Dark toned base and fluted mouldings contrast with curved pilasters of lighter tone. Graceful lines and the use of exquisitely-grained Walnut, hand-rubbed to a soft, velvety finish, make this a superb cabinet creation.

Dimensions
24³/₈" Wide 40" High 11¹/₈" Deep

PHILCO 643B \$79.50

(with batteries)

Complete with scientifically designed Philco All-wave Aerial . . . \$84.50

A superb Baby Grand cabinet for the finest battery-operated Philco ever built! Dark toned fluted pilasters set off its instrument panel of beautifully figured East Indian Laurel. Double curved end panels give distinctive new shape. Hand-rubbed to a soft, lustrous finish.

Dimensions
15⁵/₈" Wide 20¹/₄" High 10¹⁵/₁₆" Deep



AMERICAN AND FOREIGN BATTERY RECEIVER

None of the features listed below is important unless all of the features have been designed to match each other to achieve a **Balanced Unit Whole**. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

MAJOR TONE FEATURES

Power Driven Audio System

Class B for battery economy. Gives amazing tone and power unequalled in battery sets. True, clear, undistorted on both music and speech.

Philco Permanent Field Dynamic Speaker

Exclusive Philco Moving Coil Construction makes the speaker extremely responsive.

Tone Control

- A. Mellow—for American reception.
- B. Brilliant—for American reception.
- C. Noise Reducing—for Foreign reception.

Live Rubber Condenser Mounting

Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

Philco Inclined Sounding Board

- A. The incline directs the high notes (treble) up to your ears, preserving the sparkle and brilliance of the original.
- B. The large sounding board area faithfully reproduces the low notes (bass), thus preserving the depth and sonority of the original.

Result: Clear, life-like reception, as if the artists were present "in person."

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit

Through the scientific balancing of each unit with all others, Philco engineers have raised the all-wave performance of the superheterodyne circuit to new heights of perfection.

7 Philco High Efficiency Tubes. Types 34, 34, 32, 19, 166, 30, 30

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

Rigid Chassis Base

Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded

Both circuits and tubes metal shielded throughout to attain maximum amplification.

Philco Long-Life A Power Unit

Amazingly low operating cost. Equipped with Philco A Battery which lasts years; recharging gives long service and restores battery to original efficiency. Lowest cost battery set operation in all radio.

Philco "Plug-In" B and C Power Unit

Combination B and C unit battery. Single cable plug-in connection. No fussing—no messy wires—no danger of blowing out a set of tubes. Long life.

Safe from Fire and Shock

Built to conform in every respect to the Underwriters' Safety Standards.

Philco Low Loss Efficiency Wiring

Each part designed and tested to provide continuous operation even under extreme humidity or temperature conditions.

MAJOR ALL-WAVE FEATURES

Broadcast Band Coverage

Both Daylight and Night-time Foreign and American Short-Wave Broadcasts . . . Both Police Call Bands, Aircraft, Ship and Amateur Bands . . . Standard American Band . . . U. S. Government Weather Forecasts.

Tapered Volume Control

Even the strongest local stations can be tapered down to desired volume.

Wave Band Indicator

Position of lower center control shows wave band in use.

Full Automatic Volume Control

To counteract fading of distant stations and blasting of local stations.

Precision Radio Dial

Station settings are spaced farther apart on this dial. Result: The easiest, most precise tuning in all radio.

Illuminated Tuning Dial

Illuminated Dial with large, readable, well-spaced numerals for quick, accurate tuning.

Noise Excluding Signal Amplifier (Robot Tuner)

Automatically amplifies the station signal while rejecting interference and image noise.

Philco 643A available with Philco Long-Life Dry A Power Unit

Two-Speed Planetary Drive Station Selector

- A. Fast Speed for swift turning.
- B. Slow Speed for precision tuning of short-wave stations. 80 to 1 ratio.

Automatic Aerial Selector

To span oceans requires a scientifically designed All-wave aerial system. Used with the Philco All-wave Aerial, the built-in Aerial Selector automatically switches in the exact electrical values needed to maintain maximum power on each wave band. In effect, a separate aerial for each band.

Certain variations in tone features naturally exist between table and inclined sounding board models because of the much larger sounding board area in the "X" Models.

To get out of this receiver all the performance which has been built in, be sure to equip it with a Philco All-wave Aerial.

Philco 643



**POWERFUL,
ECONOMICAL
TO OPERATE**



AMERICAN AND FOREIGN RECEIVERS

None of the features listed below is important unless all of the features have been designed to match each other to achieve a Balanced Unit Whole. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

PHILCO 623F...\$75 (with batteries)

Complete with scientifically designed
Philco All-wave Aerial . . . \$80

(Philco 623F is housed in the same cabinet as Philco 620F.
For cabinet description see Page 18.)

PHILCO 623B...\$59.95 (with batteries)

Complete with scientifically designed
Philco All-wave Aerial . . . \$64.95

(Philco 623B is housed in the same cabinet as Philco 620B.
For cabinet description see Page 18.)

MAJOR TONE FEATURES

Power Driven Audio System—Class B for battery economy. Gives amazing tone and power unequalled in battery sets. True, clear, undistorted tone on both music and speech.

Philco Permanent Field Dynamic Speaker—Exclusive Philco Moving Coil construction makes the speaker extremely responsive.

Tone Control

- A. Brilliant—for nearby reception.
- B. Noise Reducing—for distant reception.

Live Rubber Condenser Mounting—Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit—Through the scientific balancing of each unit with all others, Philco engineers have raised the All-wave performance of the superheterodyne circuit to new heights of perfection.

6 Philco High Efficiency Tubes—Types 166, 30, 30, 34, 32, 19—By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

Certain variations in tone features naturally exist between table and furniture models because of the much larger sounding board area in the larger models.

Rigid Chassis Base—Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded—Both circuits and tubes metal shielded throughout to attain maximum amplification.

Philco Long Life A Power Unit—Amazingly low operating cost. Equipped with Philco A Battery which lasts years; recharging gives long service and restores battery to original efficiency. Lowest cost battery set operation in all radio.

Philco "Plug-in B and C" Power Unit—Combination B and C unit battery. Single cable plug-in connection. No fussing—no messy wires—no danger of blowing out a set of tubes. Long life.

Safe from Fire and Shock—Built to conform in every respect to the Underwriters' Safety Standards.

Philco Low Loss Efficiency Wiring—Each part designed and tested to provide continuous operation even under extreme humidity or temperature conditions.

MAJOR ALL-WAVE FEATURES

Broadcast Band Coverage—Standard American Band . . . Both Police Call Bands, Amateur, Ship and Aircraft Bands . . . Both Daylight and Night-time Foreign and American Short-Wave Broadcasts.

Philco 623A available with Philco
Long-Life Dry A Power Unit

Ball-Bearing Tuning—Smooth, accurate station tuning through ball-bearing reduction drive.

Tapered Volume Control—Even the strongest local stations can be tapered down to desired volume.

Wave Band Indicator—Position of lower center control shows wave band in use.

Illuminated Tuning Dial—Illuminated Dial with large, readable, well-spaced numerals for quick, accurate tuning.

Full Automatic Volume Control—To counteract fading of distant stations and blasting of local stations.

Precision Radio Dial—Station settings are spaced farther apart on this dial. Result: The easiest, most precise tuning in all radio.

Two-Speed Gear-Drive Station Selector

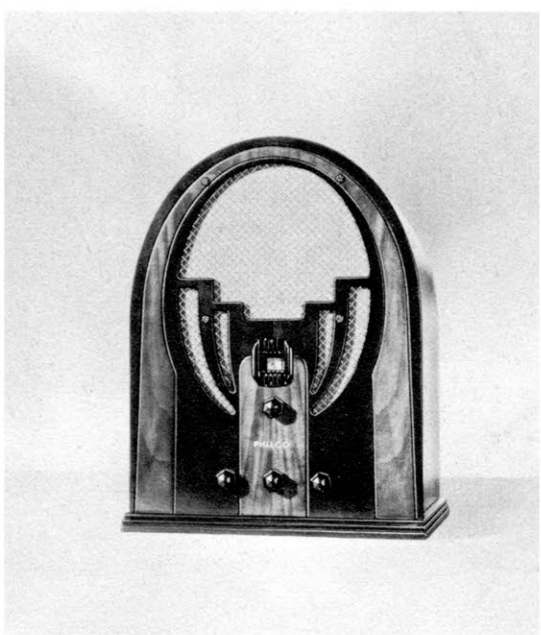
- A. Fast Speed for swift turning.
- B. Slow Speed for fine tuning of short-wave stations. 50 to 1 ratio.

Automatic Aerial Selector—To span oceans requires a scientifically designed All-wave aerial system. Used with the Philco All-wave Aerial, the built-in Aerial Selector automatically switches-in the exact electrical values needed to maintain maximum power on each wave band. In effect, a separate aerial for each band.

To get out of these receivers all the performance which has been built in, be sure to equip them with Philco All-wave Aerials.

Philco 623

THE STANDARD BATTERY SET OF AMERICA!



AMERICAN RECEIVERS

None of the features listed below is important unless all of the features have been designed to match each other to achieve a Balanced Unit Whole. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

PHILCO 38F . . . \$65 (with batteries)

Complete with scientifically designed Philco All-wave Aerial \$70

(Philco 38F is housed in the same cabinet as Philco 60F. For cabinet description see Page 26.)

PHILCO 38B . . \$49.95 (with batteries)

Complete with scientifically designed Philco All-wave Aerial \$54.95

(Philco 38B is housed in the same cabinet as Philco 60B. For cabinet description see Page 26.)

MAJOR TONE FEATURES

Power Driven Audio System—Class B for battery economy. Gives amazing tone and power unequalled in battery sets. True, clear, undistorted tone on both music and speech.

Philco Permanent Field Dynamic Speaker—Exclusive Philco Moving Coil construction makes the speaker extremely responsive.

Live Rubber Condenser Mounting—Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit—Through the scientific balancing of each unit with all others, Philco engineers have raised the performance of the superheterodyne circuit to new heights of perfection.

Certain variations in tone features naturally exist between table and furniture models because of the much larger sounding board area in the larger models.

5 Philco High Efficiency Tubes.
Types 1A6, 19, 32, 30, 32

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

Rigid Chassis Base—Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded—Both circuits and tubes metal shielded throughout to attain maximum amplification.

Philco Long Life A Power Unit—Amazingly low operating cost. Equipped with Philco A Battery which lasts years; recharging gives long service and restores battery to original efficiency. Lowest cost battery set operation in all radio.

Philco "Plug-in" B and C Power Unit—Combination B and C unit battery. Single cable plug-in connection. No fussing—no messy wires—no danger of blowing out a set of tubes. Long life.

Safe from Fire and Shock—Built to conform in every respect to the Underwriters' Safety Standards.

Philco 38A Available with Philco Long-Life Dry A Power Unit

Philco Low Loss Efficiency Wiring—Each part designed and tested to provide continuous operation even under extreme humidity or temperature conditions.

MAJOR TUNING FEATURES

Broadcast Band Coverage
Standard Broadcast Band . . . Both Police, many Aircraft and Amateur stations.

Ball-Bearing Tuning—Smooth, accurate station tuning through ball-bearing reduction drive.

Tapered Volume Control—Even the strongest local stations can be tapered down to desired volume.

Wave Band Switch—Convenient control to change wave bands.

Illuminated Tuning Dial—Illuminated Dial with large, readable, well-spaced numerals for quick, accurate tuning.

To get out of these receivers all the performance which has been built in, be sure to equip them with Philco Aerials.

Philco 38

UNEXCELLED FOR OPERATION ON 32-VOLT SYSTEMS



PENTODE AMERICAN RECEIVER

None of the features listed below is important unless all of the features have been designed to match each other to achieve a Balanced Unit Whole. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

PHILCO 32F . . \$79.50

Complete with scientifically designed Philco
All-wave Aerial \$84.50

(Philco 32F is housed in the same cabinet as Philco 620F.
For cabinet description see Page 18.)

PHILCO 32B \$65

Complete with scientifically designed Philco
All-wave Aerial \$70

(Philco 32B is housed in the same cabinet as Philco 650B.
For cabinet description see Page 10.)

MAJOR TONE FEATURES

Pentode Audio System—3 Watts—Pentode power. True, clear, undistorted tone on speech and music.

Standard Philco Electro-Dynamic Speaker

Exclusive Philco Moving Coil makes this speaker extremely responsive.

Tone Control

- A. Brilliant—for nearby reception.
- B. Noise Reducing—for distant reception.

Live Rubber Condenser Mounting — Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

Certain variations in tone features naturally exist between table and furniture models because of the much larger sounding board area in the larger models.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit—Through the scientific balancing of each unit with all others, Philco engineers have raised the performance of the superheterodyne circuit to new heights of perfection.

Non-Radiating—Built-in filter prevents radiated interference in other nearby sets.

Line Noise Rejectors—Keep 32 volt line noises out of the radio.

6 Philco High Efficiency Tubes.
Types—77, 75, 44, 44, 84, 42

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less efficient tubes.

Rigid Chassis Base—Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded—Both circuits and tubes metal shielded throughout to attain maximum amplification.

Safe from Fire and Shock—Built to conform in every respect to the Underwriters' Safety Standards.

MAJOR TUNING FEATURES

Broadcast Band Coverage—Standard Broadcast Band . . . Both Police, many Aircraft and Amateur Stations.

Wave Band Switch—Convenient control to change wave bands.

Illuminated Station Recording Dial—Illuminated Drum Type Dial for quick, accurate tuning and ample space for recording call letters of favorite stations.

Tapered Volume Control

Even the strongest local stations can be tapered down to desired volume.

Noise-Excluding Signal Amplifier (Robot Tuner)—Automatically amplifies the station signal while rejecting interference and image noise.

Full Automatic Volume Control—To counteract fading of distant stations and blasting of local stations.

To get out of this receiver all the performance which has been built in, be sure to equip it with a Philco Aerial.

Philco 32

TRUE PHILCOS FOR FINEST D. C. OPERATION!



AMERICAN AND FOREIGN RECEIVERS

None of the features listed below is important unless all of the features have been designed to match each other to achieve a **Balanced Unit Whole**. It is this exact matching and balancing of each feature with all others which distinguishes a Philco from an ordinary radio and makes it truly "A Musical Instrument of Quality."

PHILCO 641X . . . \$100

Complete with scientifically designed Philco
All-wave Aerial \$105
(Philco 641X is housed in the same cabinet as Philco 640X.
For description see page 14.)

PHILCO 641B . . . \$75

Complete with scientifically designed Philco
All-wave Aerial \$80
(Philco 641B is housed in the same cabinet as Philco 650B.
For description see page 10.)

MAJOR TONE FEATURES

Super Class A Power Driven Audio System—Reception without distortion at all usable volumes.

Oversize Philco Electro-Dynamic Speaker—Exclusive Philco Moving Coil gives faithful response from bass to treble.

Program Control—To adjust the radio to receive each program at its best.

- A. Mellow—American Stations
- B. Brilliant—American Stations
- C. Normal—Foreign Stations
- D. Noise Reducing—Foreign Stations

Live Rubber Condenser Mounting—Patented Philco feature eliminating microphonic "squeals" and distortion. Full tonal range otherwise impossible.

Automatic Bass Compensation—To compensate for the lessened ability of the normal ear to hear the low notes (bass) in true proportion at ordinary low room volumes, Philco Bass Compensation automatically brings up the bass as volume is turned down.

Certain variations in tone features naturally exist between table and inclined sounding board models because of the much larger sounding board area in the "X" model.

MAJOR ELECTRICAL FEATURES

Philco Balanced Superheterodyne Circuit—Through the scientific balancing of each unit with all others, Philco engineers have raised the All-wave performance of the superheterodyne circuit to new heights of perfection.

Non-radiating—Built-in filter prevents radiated interference in other nearby sets.

Power Line Noise Rejectors—Keep power line noises out of the radio.

7 Philco High Efficiency Tubes.
Types 78, 78, 76, 43, 6A7, 85, 43

By scientifically combining correctly chosen types of Philco High Efficiency Tubes, Philco always achieves power and selectivity impossible with even a greater number of less-efficient tubes.

Rigid Chassis Base—Permanent alignment guaranteed through assembly on rigid rust-proofed steel.

Completely Shielded—Both circuits and tubes metal shielded throughout to attain maximum amplification.

Safe from Fire and Shock—Built to conform in every respect to the Underwriters' Safety Standards.

MAJOR ALL-WAVE FEATURES

Broadcast Band Coverage—Both Daylight and Night-time Foreign and American Short-Wave Broad-

casts . . . Both Police Call Bands, Amateur, Ship and Aircraft Bands . . . Standard American Band.

Wave Band Indicator—Position of lower center control shows wave band in use.

Full Automatic Volume Control—To counteract fading of distant stations and blasting of local stations.

Precision Radio Dial—Station settings are spread farther apart on this dial. Result: The easiest, most precise tuning in all radio.

Two-Speed Planetary Drive Station Selector—

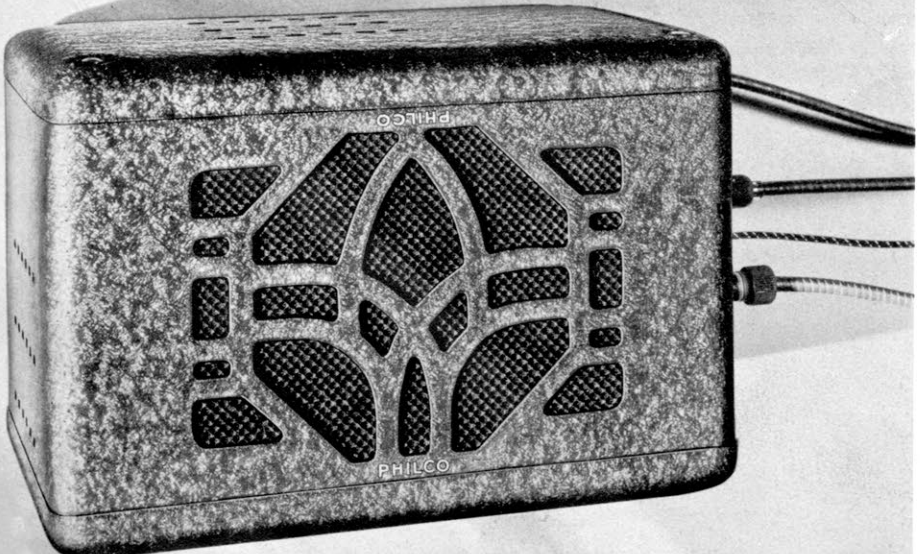
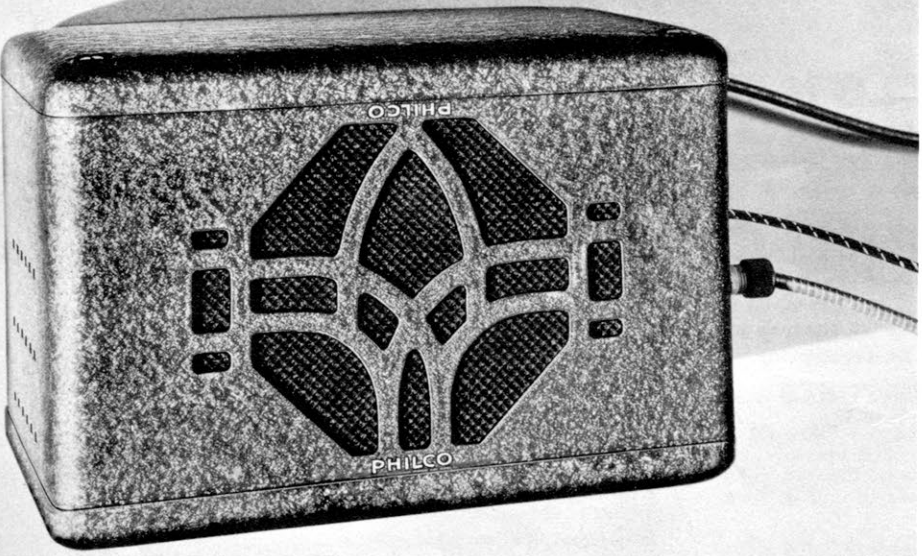
- A. Fast Speed for swift turning.
- B. Slow Speed for precision tuning of short-wave stations. 80 to 1 ratio.

Noise-Excluding Signal Amplifier (Robot Tuner)—Automatically amplifies the station signal while rejecting interference and image noise.

Automatic Aerial Selector—To span oceans requires a scientifically designed All-wave aerial system. Used with the Philco All-wave Aerial, the built-in Aerial Selector automatically switches-in the exact electrical values needed to maintain maximum power on each wave band. In effect, a separate aerial for each band.

To get out of these receivers all the performance which has been built in, be sure to equip them with Philco All-wave Aerials.

Philco 641



TESTED AND SELECTED

By 29 Great Car Manufacturers

PHILCO 805

An amazing value! Single-Unit All-Electric Superheterodyne operating on either under-car or roof aerials. Five Philco High-Efficiency Tubes, Automatic Volume Control, Improved Electro-Dynamic Speaker and Rubber-Mounted Shock-Proof Chassis. Beautiful new Control Unit with Transversely Illuminated Dial and Safety Lock. Control fits on either steering column or instrument panel. Handsome, round-cornered case of black, crystal-finished steel, with universal mounting—fits ANY car. Improved sensitivity and selectivity, background noise reduced to a minimum, low current consumption, unusual power and true Philco tone! **\$42.95**

PHILCO 806

A quality Single-Unit All-Electric Superheterodyne with latest features! Operates on either under-car or roof aerials. Six Philco High-Efficiency Tubes, Improved Automatic Volume Control, Finer Electro-Dynamic Speaker, Rubber-Mounted Shock-Proof Chassis and Full Range Tone Control. Beautiful new Control Unit with Transversely Illuminated Dial and Safety Lock. Control fits on either steering column or instrument panel. Handsome, round-cornered, crystal-finished case that fits ANY car. Low current consumption, background noise reduced to a minimum, improved sensitivity and selectivity, tremendous power and superb tone! **\$49.95**

PHILCO 807

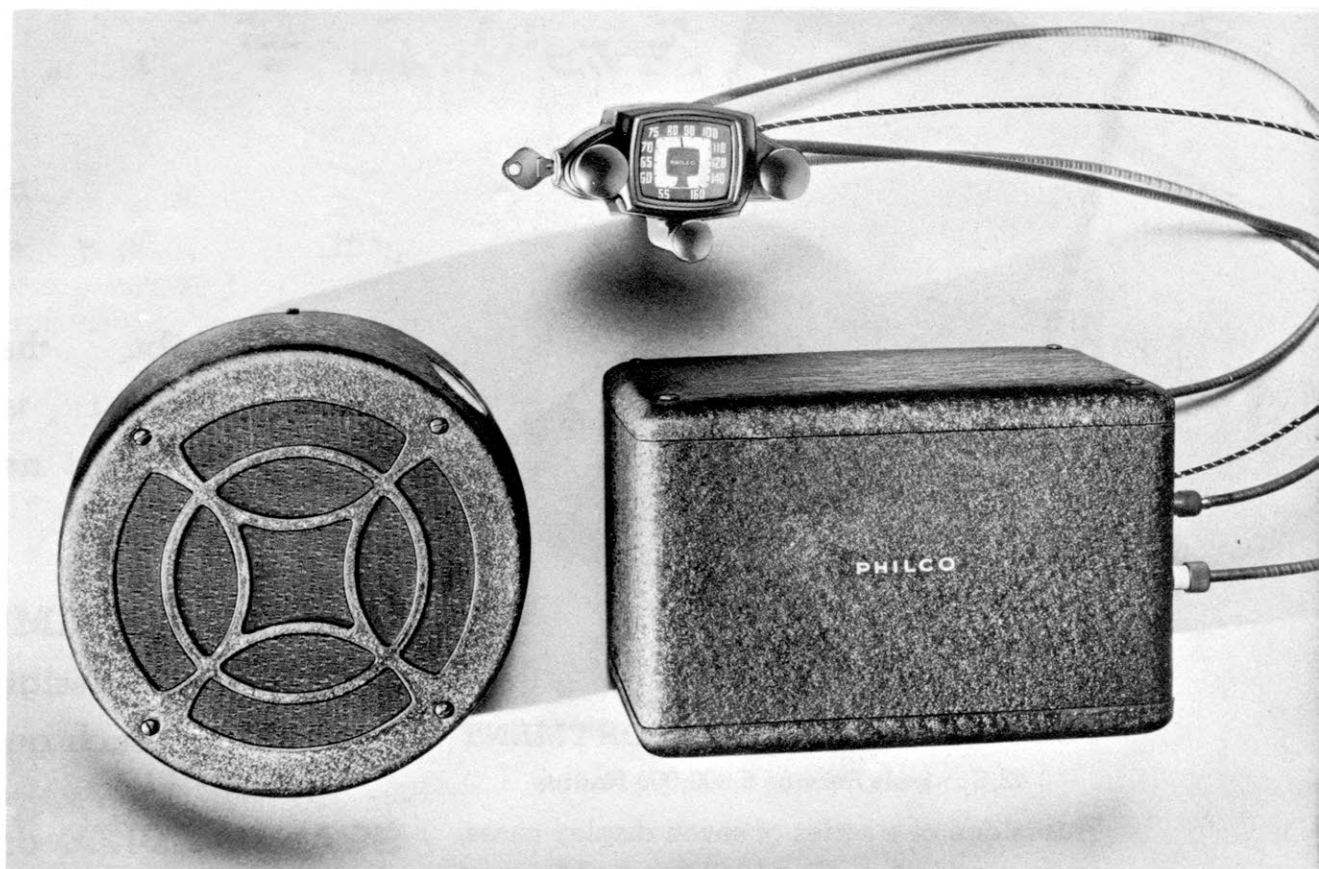
A still finer Philco Single-Unit All-Electric Superheterodyne that operates on either under-car or roof aerials. Seven Philco High-Efficiency Tubes, Improved Automatic Volume Control, Finer Electro-Dynamic Speaker, Rubber-Mounted Shock-Proof Chassis and New, Full Range Tone Control with knob on Control Unit. Beautiful new Control Unit with Transversely Illuminated Dial and Safety Lock. Control fits on either steering column or instrument panel. Handsome, round-cornered, crystal-finished case that fits ANY car. Still greater sensitivity and selectivity, greater tone range, better fidelity and exceptionally high, undistorted output. **\$59.95**

21,500,000 CARS ON THE ROAD

AND ONLY 10% EQUIPPED WITH RADIO!

PHILCO 809

A high quality, Two-Unit All-Electric Superheterodyne with six Philco High-Efficiency Tubes, large separate Electro-Dynamic Speaker, Improved Automatic Volume Control, New, Full Range Tone Control with knob on Control Unit, and beautifully designed Control Unit that fastens on either the steering column or instrument panel. Has all the fine features of Model 807, including greater sensitivity and selectivity, improved fidelity and high, undistorted output, plus the marvelous tone quality given by the separate speaker. Meets every requirement of the buyer who wants a good 2-unit set at a moderate price. **\$59.95**



PHILCO 808

Here is the De Luxe Philco—the finest auto radio ever built! Designed especially for the motorist who wants the very best auto radio that money can buy. This is a Two-Unit All-Electric Superheterodyne that fits ANY car. Newly designed, large separate Electro-Dynamic Speaker that gives a rich, clear tone of unusual naturalness. Included in this De Luxe Philco are all the outstanding features of Model 807, plus Controlled Fidelity, which gives finer all-around performance! **\$75.00**



Philco Auto Radios

USE GENUINE PHILCO PARTS

Eliminate Guesswork Avoid Trouble . . .



VOLUME CONTROL ASSORTMENT

42 Controls Service 5,500,000 Radios

This is one of a series of seven display cases, each containing a complete replacement chart for all model Philcos.

When servicing Philco Radios use the exact Philco parts specified by the Philco Engineering Division.

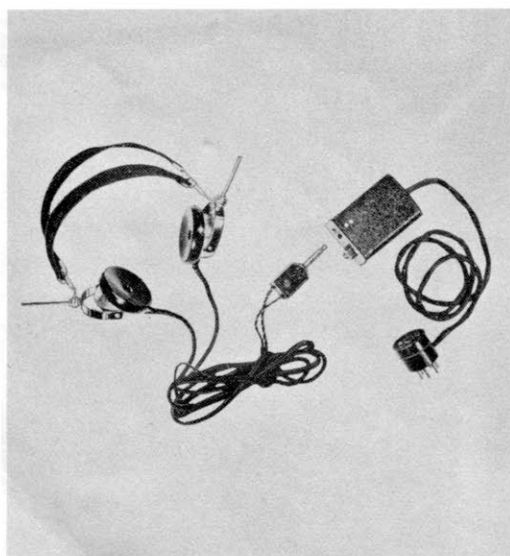
Philco Distributors have in stock complete sets of every kind of replacement part for all Philco Models. Any part needed can be selected in an instant's time.

IT IS JUST AS IMPORTANT that you use high quality, exactly designed repair parts, as it is for the factory to use such quality parts in original sets.

STANDARDIZE on Philco high-quality parts in all your service work.

PHILCO HEAD-PHONE RECEPTION

now available to all short-wave fans!



The Philco head-phone kit designed for individuals desiring "DX" reception or radio enjoyment without disturbing others, as well as for invalids, hospital use, deaf persons.

- Easy to connect—just plug into tube socket!
- Unnecessary to remove chassis from cabinet. Anyone can install it!
- Speaker automatically disconnected when head-phones are in use.
- Adapter remains connected without affecting tone of radio set.

For use on every type radio using either single output tube or driver and push-pull output

Philco Head-Phone and Adapter Kit comes complete with Highest Quality Lightweight Phones...Ready to Plug in... **\$7.50**

Philco Parts

PHILCO HIGH EFFICIENCY TUBES improve the performance of ANY radio

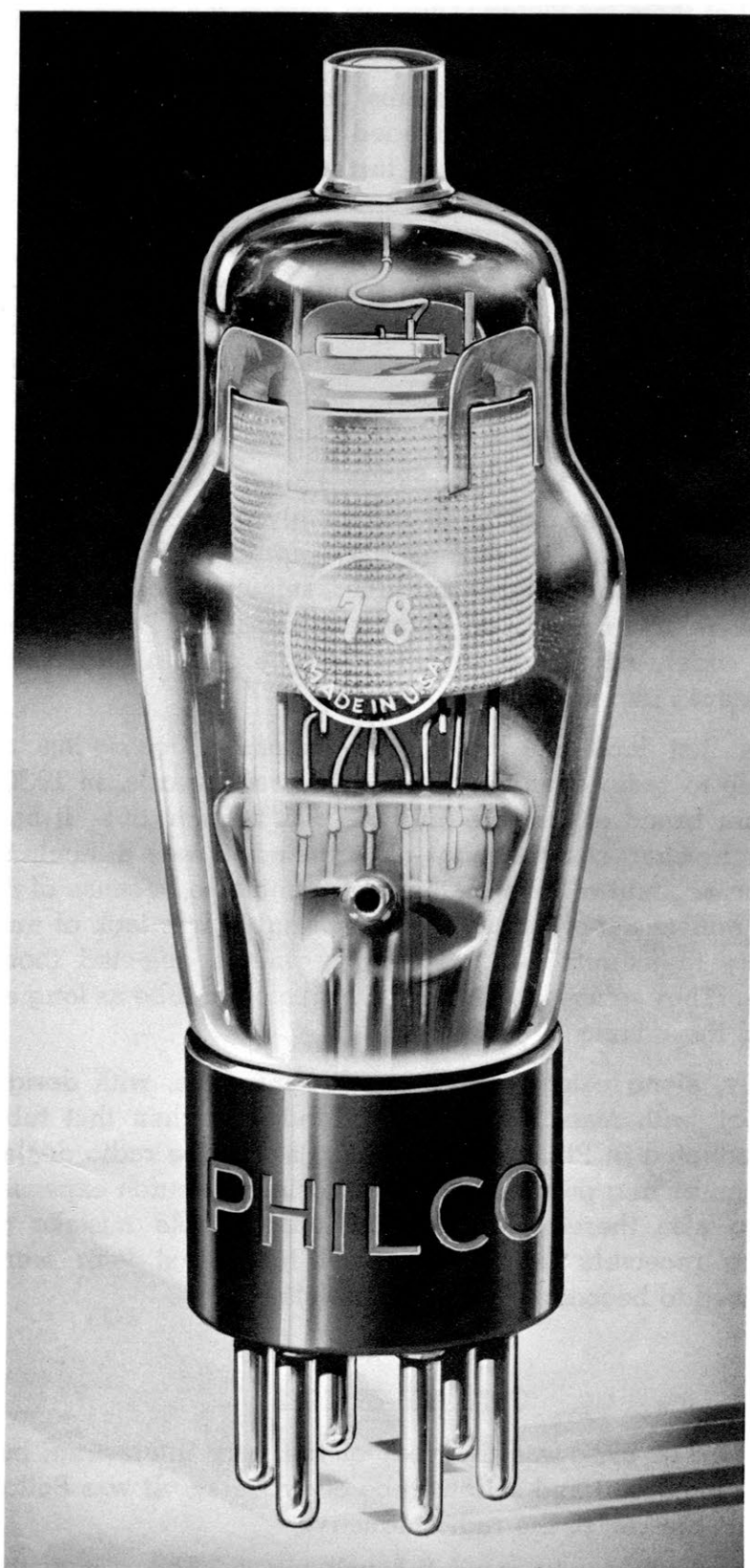
**MORE COMPACT . . .
MORE EFFICIENT . . .
CONSUME LESS CURRENT
AND LAST LONGER**

Yes, more than 40 million Philco Tubes are in use today in over 5,500,000 Philco radio receivers. Tubes wear out. They must be replaced. Therefore, think what a tremendous, steady, daily replacement business is created by this overwhelming use of Philco Radio Tubes.

Think of it! Over 5,500,000 Philco radio owners will naturally insist on Philco tubes to replace Philco tubes. And remember, that each year millions more Philco tubes are put into daily use by a vast army of new buyers of Philco Home Sets and Automobile Radio. No wonder that the sale of Philco tubes soars each year, and that the retail dealer finds it steadily becoming one of the most consistent profit items in his business.

Bear in mind also, that the above figures do not even include the millions of Philco tubes sold as replacement tubes in other makes of radio. The public has come to realize that Philco tubes do improve the performance of any radio, and Philco advertising campaign will continue to carry this message to millions.

**"PHILCO REPLACEMENT TUBES IMPROVE
THE PERFORMANCE OF ANY RADIO"**



**REMEMBER: 40 Million Philco Tubes in Use
in Over 5,500,000 Philco Radios**

Philco Tubes

of Philco research engineering, and then, from the very beginning, Philco-Transitone was priced right. It was priced to get volume business and this policy, as you well know, has been amazingly successful. Philco is today the world's largest producer of automobile radios.

It was also in 1931 the dry electrolytic condensers came into extensive use as a means of making a considerable saving in the first cost of a receiver. Philco engineers withheld approval of them for Philco radios, in spite of the temptation to take advantage of this manufacturing saving.

Philco engineers turned thumbs down on dry electrolytic condensers until certain needed improvements were incorporated and until they had further been given a life test over a long period.

It was surely a wise decision, and a decision that saved Philco dealers and the buying public an enormous amount of costly trouble. Today these improved dry electrolytic condensers are used in Philco radios, but only in those circuit positions and for those purposes where years of tests have proven them to be entirely satisfactory.

In the Fall of this same year, 1931, Philco also decided that variable mu tubes had been sufficiently perfected to justify offering them to the dealers and public in Philco radio receivers. These variable mu tubes, sometimes called multi-mu, were first introduced about the middle of 1930. They were widely advertised at that time by a certain then quite important radio company.

Those first multi-mu tubes, you remember, gave lots of trouble to radio dealers. Then shortly afterwards, in 1930, another brand of variable mu tube was brought out. It had different characteristics, but nevertheless it was difficult to use on account of high plate current and also because of its very remote cut-off point. Another trouble was lack of uniformity in manufacture. Philco engineers detected those faults. They refused to O. K. the variable mu tube as long as it had those faults.

Finally, along came a third variable mu tube, with design correct, with manufacturing stabilized, and then that tube was adopted in Philco radio. Philco saved the radio dealer and the buying public from a lot of grief and much expense. Philco also thereby avoided the unforgivable mistake of selling receivers requiring special tubes that later were destined to become absolutely obsolete.

THE YEAR 1932

The year of 1932 was the year of the very interesting, but really important and serious tube controversy. It was Philco against the rest of the radio industry.

Philco strongly advocated 6.3 volt tubes. The rest of the industry just as strongly advocated 2.5 volt tubes. And both types of tubes were designed to be more efficient, more rugged and smaller.

However, the 6.3 volt tubes, which were necessary for automobile radio, had been developed by Philco as hum-free tubes suitable for use in AC receivers, as well as in DC and automobile radio.

The other manufacturers, not having found how to make 6.3 volt tubes free of AC hum, claimed that 2.5 volt tubes were needed for AC receivers. Apparently they did not know that Philco engineers had solved that problem.

Philco engineers had been developing 6.3 volt tubes over a long period of time and had thoroughly tested them. They knew that this type of tube could be satisfactorily used in all receivers, including AC radios. This meant that all the many advantages of the AC tube were preserved. Therefore, regardless of the organized opposition of the rest of the industry, Philco definitely adopted the 6.3 volt tube for all Philco radios.

Time has certainly proven Philco was right, because today the 6.3 volt tube is being used by almost all radio manufacturers in AC receivers, as well as DC, automobile and AC-DC receivers.

Practically no trouble whatever was experienced with the original Philco 6.3 volt tubes. They continued to be trouble-free from the very beginning, and this is about the only case on record where new type tubes were right in design and manufacture from the start.

Next came Class B Audio. It was ballyhooed to the skies as something great and revolutionary. Manufacturers rushed to adopt it—except Philco. Philco decided not to go into Class B Audio for AC sets because it caused poor tone at ordinary room volume—the very degree of volume most important to the user.

Competitors could make quite wonderful demonstrations of their radios at high volume. It made quite an impression temporarily. Philco appeared to many dealers to have made a mistake, but today Philco's competitors no longer use Class B Audio for AC sets. They found out that clear, undistorted tone at ordinary room volume was mighty important.

Still more important is the fact that Philco later developed Super Class A Audio, which gave all the punch and tone of Class B at high volume, and yet had all the fine tonal qualities of Class A at the moderate volumes ordinarily used in the home.

Incidentally, you may remember that with Class B Audio, it was necessary to use a low-resistance rectifier for the plate supply. The hot-cathode mercury rectifier was used by many manufacturers, but Philco foresaw the vast trouble which did later develop with mercury rectifiers, and Philco naturally did not use them. Instead, Philco engineers perfected and used a low-resistance vacuum rectifier which superseded the mercury rectifier tube.

At this same time, Philco avoided using mystifying tuning meters and troublesome neon tuning lamps, and in their stead, brought out the popular shadow tuning. All dealers know how this shadow tuning facilitates correct and easy tuning.

The Inclined Sounding Board—another exclusive Philco achievement in 1932. All dealers know about this great radio development, available only on Philco radios. And right in this connection, Philco pioneered the legless type of cabinet. At that time, many dealers thought they were too radical. In fact, they did look strange, but the public bought them rapidly and at good prices. Today it is the cabinet with legs that looks strange. The Philco floor type cabinet is the public's choice by a tremendous margin.

THE YEAR 1933

Vibrator troubles in many of certain automobile radio receivers! Will anybody in the retail business ever forget it? This type of vibrator, less expensive to use than the reliable

dynamotors, was brought out in 1933. Philco stuck to the more expensive and proven dynamotor. Finally, the latter part of 1933, after much research work and testing, Philco brought out an improved vibrator designed to meet all operating requirements, and free of trouble in service.

We must not forget to mention that the famous All-Wave Philco 16 Model was brought out in 1933, and ever since it has been the world's biggest selling quality radio.

Philco foresaw the appeal of foreign reception, and developed All-Wave radios without plug-in coils, radios that were easy to operate and performed so well that short-wave receivers became immensely popular.

THE YEAR 1934

The marvelous noise reducing Philco All-Wave Aerial—perfected and introduced in 1934. The enormous popularity of all-wave, foreign reception radio made such an efficient aerial absolutely necessary.

It is true that at this time certain other All-Wave Aerials had reached the market. They did reduce the interference noise on short-wave, but they had no noise reducing properties on standard broadcast frequencies.

Philco realized that most people were using their All-Wave receivers on standard broadcasts ninety percent of the time. Obviously then, standard broadcast had to be considered even first in the designing of the ideal All-Wave Aerial.

Philco engineers concentrated on this task—the designing of an All-Wave Aerial—

- (A) which would be fully efficient on both standard broadcast and short-wave frequencies—
- (B) which would be very easy to install, and
- (C) which would reduce interference noises on standard broadcasting as well as on all-wave foreign stations.

This was accomplished, and after extensive, exhaustive tests in the field, the great and popular Philco All-Wave Aerial was placed upon the market. Today it is a tremendous seller. It has easily doubled the great popularity of foreign reception receivers.

In 1934 Philco Automobile Radio in itself became big business. Philco's 1931 vision of this industry was being more than justified. Sales and production soared to new high peaks. This was due in a large measure to outstanding Philco engineering developments in automobile radio.

It was in 1934 that Philco engineers designed Philco-Transitone Auto Radios with the receiver, the plate supply unit and the loud speaker all in one single compact housing. This new compact design required less space and was easier to mount in an automobile. This ease of installation saved time and money for the dealer. It greatly increased the popularity of automobile radio with the dealer and the public.

In addition, the performance of automobile radio was still further perfected by Philco engineers in 1934. Interference noises, originating in the automobile, were eliminated; background noises were greatly reduced. A new high standard of tone quality in auto radio performance was established.

Also, in 1934 Philco pioneered with High Fidelity radio receivers, the finest quality of musical instruments; radios with a tonal range extending to 7500 cycles. Previous to Philco High Fidelity, the best commercial radios had a tonal range not exceeding 3500 cycles. In other words they reproduced only a portion of music's important overtones. High Fidelity reproduces all those delicate overtones so necessary to true musical enjoyment. In other words, it reproduces in full, pure tone completeness.

High Fidelity radio was made practical for general public use and enjoyment by several highly important Philco engineering achievements.

For instance, wide-channel reception was made practical by the development of a new I.F. circuit, which makes it possible to completely control the fidelity by simply turning a control knob.

Philco also perfected a marvelous and dependable Two-in-one High Fidelity Speaker that covers the entire range from 50 to 7500 cycles, and without objectionable noise. This High Fidelity Speaker replaced the troublesome and expensive double speaker system that engineers had always thought was necessary for High Fidelity reproduction.

The secret of the fine performance of this new Two-in-one High Fidelity Speaker lies, not only in the use of a light-weight driving coil, but also in its especially designed cone. This cone is constructed in two parts, the stiff inner portion giving perfect reproduction of high frequencies (high notes), and the outer flexible portion giving full, pure reproduction of low frequencies (low notes).

Now we come to another vitally important Philco engineering contribution to High Fidelity radio—Wide Angle Sound Diffusion. This is indispensable because of the greatly increased tonal range of High Fidelity. Its function is to spread and diffuse the greater volume of high notes uniformly throughout the room.

High notes, you understand, tend to travel in a straight line, and in High Fidelity reproduction you get the increased, full volume of high notes. Therefore, without Wide Angle Sound Diffusion, this volume of high notes would come forth from the speaker in an unpleasant, overpowering center "beam" with too little spreading out on either side. In Philco High Fidelity, because of this engineering achievement (in conjunction with the Inclined Sounding Board which projects the sound up to ear-level) the entire extended tonal range, the high notes as well as low notes, are spread with pleasant, true and complete uniformity throughout the entire room.

AND NOW . . . THE YEAR 1935

How does the record of the Philco engineers read for the year of 1935?

The answer is found all through this book—the full detailed story of Philco's marvelous, unparalleled complete line of merchandise for this coming Summer and Fall. It represents by far the greatest of Philco's long series of engineering production and merchandising achievements.

Read every page in this book. Study each and every model and read the detailed description of the great new engineering features, new features but absolutely tested and proven—not risky experiments.

RADIO MANUFACTURERS SERVICE

helps you to Contact your Present and Future Customers . . . Continuously, Effectively and Profitably

Created by PHILCO, a nation-wide organization of trained, experienced, and properly equipped **SERVICEMEN** are helping radio owners obtain the maximum performance from their sets. Every alert, intelligent dealer welcomes the cooperation of this army of well-informed, skilled Servicemen—members of Radio Manufacturers Service.



A PHILCO SERVICE PLAN

WHY?—Because every dealer knows the importance of correct installation of the sets they sell—that satisfied customers are the best advertisement and create excellent prospects for new radios, tubes and aerials.

That is why PHILCO has developed this practical, reliable, trained service for the radio public.

BENEFITS OF MEMBERSHIP—When your Serviceman joins Radio Manufacturers Service, through the PHILCO distributor in your territory, his name is immediately placed on both the mailing list of your PHILCO distributor and that of PHILCO at Philadelphia. As a result he receives technical books, prepared by radio engineers, covering all types of installation and service problems on all sets, and in addition complete service and technical information on every PHILCO model.

Your Serviceman receives an identification card from PHILCO and you get a certificate attesting the fact that you have a qualified Serviceman who has the knowledge and equipment needed to perform first-class, satisfactory work.

PHILCO ADVERTISES SERVICE—Radio Manufacturers Service is advertised to the public by PHILCO in many ways. Boake Carter, PHILCO'S news commentator, tells radio owners why they should call on Radio Manufacturers Service Members to install or repair their radios and aerials. Every instruction sheet that is packed with new PHILCO radios tells its owner about Radio Manufacturers Service. Many other forms of "Service Sales" advertising material is available for dealer use.

BECOME IDENTIFIED—Be sure that your Service Department is identified with Radio Manufacturers Service through membership in this nationally known and nationally recognized organization. Inform the public that your store is R.M.S. headquarters in your community. Do this by displaying the regulation outdoor metal sign, by direct mail, by envelope stuffers, by distributing circulars, and by newspaper advertising. All R.M.S. advertising material, newspaper mats, and dealer tie-ins for this purpose may be secured from your PHILCO distributor.

As your daily SALES determine your present success, your daily SERVICE to customers determines your future sales and profits. Give your customers the best—join Radio Manufacturers Service, created by PHILCO to serve the radio public.

PHILCO RADIO & TELEVISION CORPORATION

The World's Largest Radio Manufacturer

PHILADELPHIA · NEW YORK · CHICAGO · SAN FRANCISCO · TORONTO · LONDON, ENG.