



Neutrodyne-Plus
A New Triumph
in Radio

PHILCO
PHILADELPHIA

Neutrodyne-Plus

A NEW term in radio to describe a remarkable enlargement of the Neutrodyne principle.

For the first time in the history of radio, the way has been found by Philco engineers to utilize the Neutrodyne principle of reproduction and at the same time combine with it maximum power.

Neutrodyne is known in radio science to give stability. It is free from oscillation. It accomplishes purity and clearness of tone.

To this quality, after three years of research, Philco engineers have added a PLUS. By a series of highly significant developments in the circuit they have added SUPER-POWER. And this without sacrificing one iota of the distinctive Neutrodyne purity of tone!

Perfect tone quality *plus* vast distance range and extraordinary selectivity—a combination new to radio. Only one term fully expresses this new discovery—

“Neutrodyne-Plus.”

Distance and Volume

You have heard people say: “Oh, I don’t care about getting distance on my set. Local stations are good enough for me.” Why? Because most sets do not have the power for clear, undistorted reception of far away stations. Distance records are often scarcely more than a catalog of call letters.

In the Philco, all this is changed. Its super-power means the ability not only to get, but fully *to enjoy* out-of-town programs. You tune in stations you never knew existed—low-power stations which the average set is not sensitive enough or powerful enough to pick up. Indeed, the Philco is making many a small broadcasting station famous.

Amazing Selectivity

Marvelously sharp tuning! Much has been said about selectivity since the very beginning of radio. To know what real selectivity means take a turn at the Philco control.

Call the roll of the stations on the air. A new experience awaits you. You can start at any point and go in either direction. Many times a hair's-breadth turn will shut out one station completely and bring another booming in. Even strong local stations are confined to only a few divisions on the dial. Distant programs come in clearly, sharply and without interference from other stations. So simple a child can tune it. And since all this is achieved with a single dial "blind groping" for stations is eliminated. No cross talk between strong locals—no howls, squeals or oscillations, but clear, sharply-defined reception. Split-hair selectivity!

Of course, we do not claim that Philco has eliminated static or heterodyning—those are problems which radio science has not solved. But we do claim that under any given air conditions Philco will give you a degree of selectivity and distance that is new to radio.

Flawless Tone

You must hear the Philco to appreciate fully what "Neutrodyne-Plus" has done in achieving power, distance-range and selectivity without sacrificing that distinctive Neutrodyne quality of tone. Flawless RE-production! Life-like fidelity!

Listen to an orchestra. You don't hear a skeleton performance of the leading instruments, but a true reproduction of the complete ensemble. Not a single instrument is lost. The drums are there, the velvet tones of the viola, the pattern accompaniment of the bass viol—all are preserved and harmoniously blended. The breadth and character of the original are retained.

Hear a voice. Be it song or speech, it comes to you unmuffled and clear, with all the finer shadings and inflections. Bell-like soprano or sonorous bass—you hear them as if singer or speaker were before you.

Close your eyes as you listen and you will realize that you are hearing *not* a radio performance but an actual RE-production, just as rendered before the microphone.

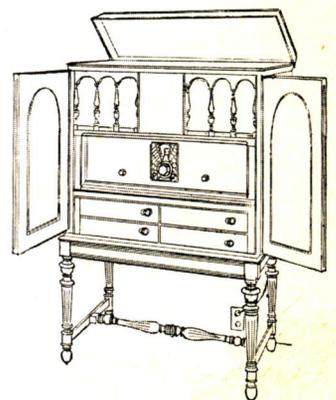


De Luxe Model

Combination Electric Phonograph-Radio

Contains an Electric Phonograph in combination with the Philco "Neutrodyne-Plus" Radio. Puts the world of recorded as well as broadcast music at your command in one instrument. Power amplification imparts a new tonal depth and life-like character to phonograph records.

The Louis XVI Cabinet is constructed with infinite care. Has beautifully matched walnut panels, inlaid with selected bird's-eye maple. Complete radio equipment; electric motor drive for phonograph. Four compartments for record books. Philco Console Grand Speaker.



Other Important Advantages

ALL that has been developed in the industry to give *complete* radio enjoyment is found in the Philco. And in addition, certain features found in no other set.

ALL-ELECTRIC—ENTIRELY DRY—The Philco is an all-electric AC Receiver. It has no batteries; uses no water, acids or liquids of any kind. *It is entirely dry.* You merely plug it into any light socket and it is ready to operate. Requires no special attention whatever.

NEEDS NO AERIAL—Thanks to its plus power, the Philco will give you perfect reception of local stations and even of many distant stations *without an aerial.* It is equipped with a special portable ground connection. The Philco is therefore *movable.* It may be taken from one room to another to suit any desire or occasion. It may be picked up and taken with you on your vacation. Merely plug it into the light socket and attach the ground. In 30 seconds it is ready to operate perfectly in its new location.

On the other hand, if you wish to use an aerial, just 25 feet of wire in the room will bring in nearby and many distant stations. And longer aerials, indoor or outdoor, bring you stations covering a remarkable distance range.

RANGE CONTROL—An important feature, exclusive with Philco, which serves several purposes. First, it separates overlapping local stations and confines each one to its correct tuning point on the dial. Thus you may hear local programs without interference, no matter how near other powerful stations may be. This advantage is particularly valuable in large cities having many broadcasting stations.

Then also, the range control gives you smooth, positive, uniform adjustment of volume. With it, you may gradually reduce to a whisper the volume of the strongest nearby station—and without “detuning,” which cuts off tone quality. Thus you have perfect control of volume without interfering in the slightest with Philco tone-quality or selectivity.

And finally, this range control acts also as a distance getter. The Philco is so selective that, by means of this range control, distant stations are often brought in and separated actually on the *same* point of the dial!

PHONOGRAPH CONNECTION—A socket is provided on the Philco dial plate into which an electric pick-up may be inserted, thus making the amplifying power tubes and speaker available for reproducing phonograph records. Through this device the Philco will reveal to you new and unsuspected beauty in your phonograph! You have no idea what new thrills lie hidden in your favorite records. The Philco will endow them with a new depth and fullness of tone, a new volume and life-like resonance.

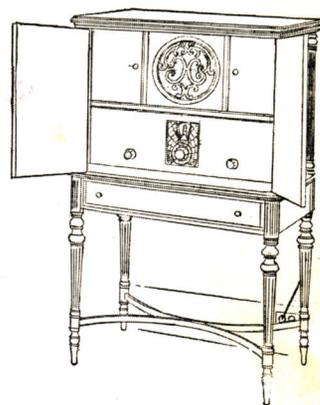
NO BOTHERSOME AC HUM—Philco has done away with the bother and annoyance of the hum peculiar to AC electric sets. This has been accomplished without cutting down tone quality. The AC hum in the Philco



The Highboy

A masterpiece of cabinet design by Albert Carl Mowitz, an international authority in the furniture arts. A modern conception of the Louis XVI period style. Handsomely matched walnut panels; fluted legs and pillars; swinging doors. The cabinet is constructed with painstaking care according to the most rigid standards of furniture craftsmanship.

This model contains the radio receiver, power supply, built-in aerial, portable ground and the Philco Console Grand Speaker. A roomy drawer with sliding arm rest forms the lower part of the cabinet.



is hardly noticeable even when broadcasting stops. This makes possible clear and enjoyable reception at low volume when you are using the radio merely as a pleasant background for reading or bridge.

ONE ILLUMINATED DIAL—Philco's single illuminated dial makes tuning easy and visible at all times. This, with the marvelous selectivity and sharp, positive tuning of the Philco, achieves absolute simplicity of operation. You need not be at all expert to secure the highest degree of Neutrodyne-Plus performance.

DAYLIGHT RANGE—Philco's super-power makes possible distant reception during the daytime. The Philco is thus an all-family set. Not only for the man-of-the-house at night, but for the lady-of-the-house during the day. After you have your Philco you will be surprised to find how many delightful radio features are on the air during the daytime.

COVERS ALL STATIONS—The Philco covers the entire broadcasting wave band—ranging from the highest at 550 kilocycles to the lowest at 1500 kilocycles. This means that Philco covers *all* the low wave-length stations. Many well-known receiving sets do not reach below 1400 kilocycles, thus making reception impossible on ten radio channels out of a total of 96.

FOUR CONDENSERS—Built like a fine watch. Look under the lid of the Philco. You will find not only the four condensers which are basically necessary to achieve the power and selectivity which the Philco gives. You will find more. *Twenty-five* generous plates to each condenser. *Three-bearing* condenser shaft. Rugged mounting cradle. Cadmium plating to prevent rust. Output transformer. Fully shielded power pack.

And—because of Philco's new way of combining *full* power with the Neutrodyne tone, the number of radio tubes has been reduced to six—yes, only six tubes! (Of course there is a seventh rectifying tube in the power pack.) Think of it! Amazing selectivity and vast distance range and with all the advantages of six tubes! The smaller number of tubes (in addition to saving initial cost, replacement expense and trouble) means naturally a better, clearer tone.

But there is even more to Philco's tube story. Philco's remarkable results are actually obtained using principally the least expensive and longest lived tubes. Tubes for the Philco set cost no more (often as much as \$10 or \$15 less) than tubes for other sets having less power and less tone quality than Philco.

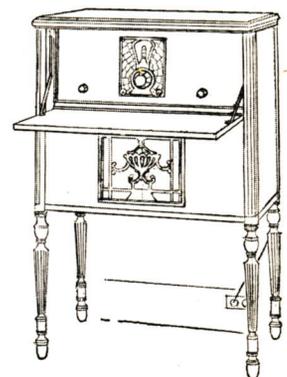
And then, not only are the longer lived types of tubes used, but in addition Philco achieves its results without forcing any tube. Notice how cool even the power tube at the left of the Philco set feels. The average life of the tubes in a Philco set can't help being much longer than usual.

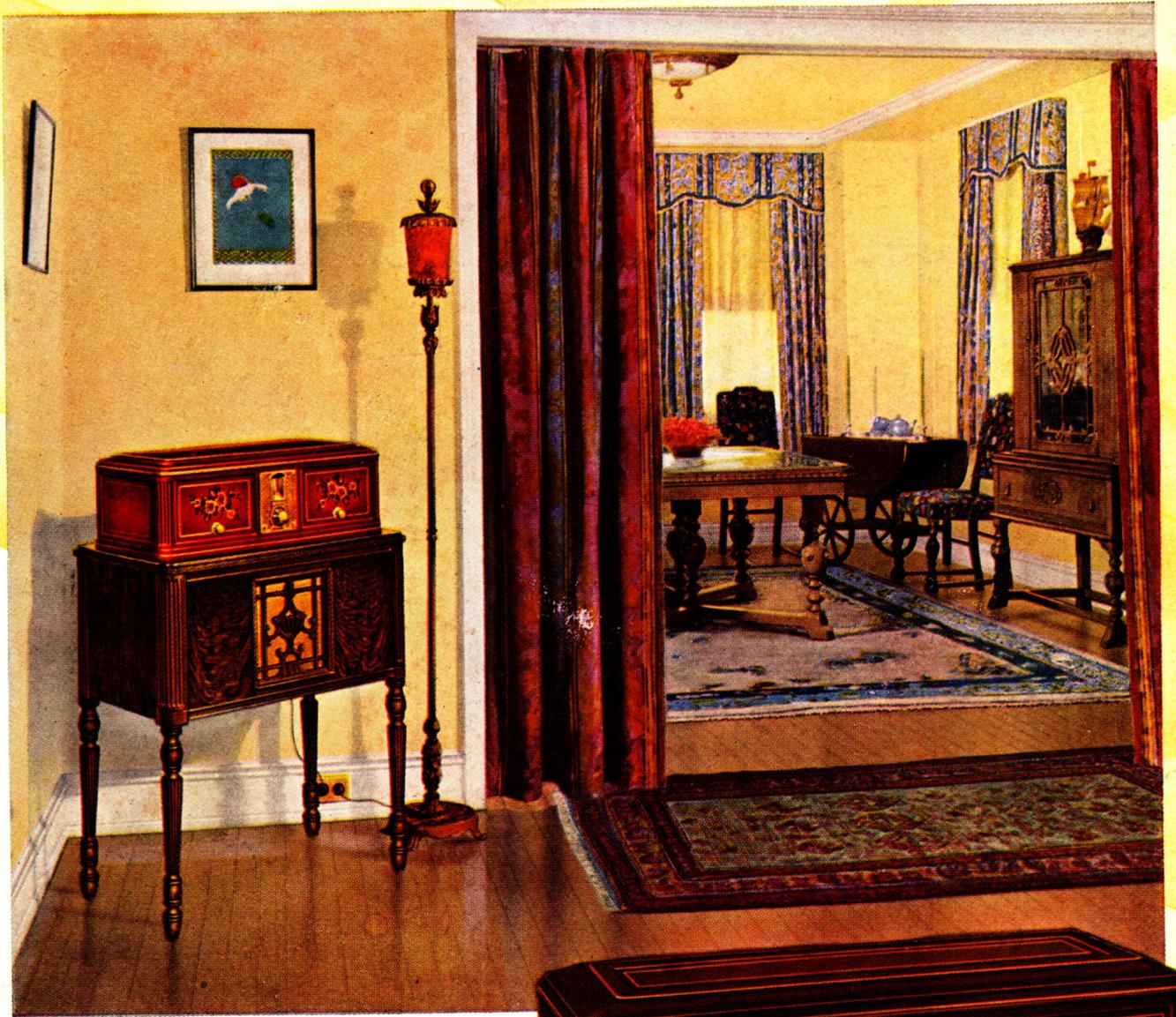
Thanks to Neutrodyne-Plus, the tube problem has been solved. The low cost and long-lived types speak for themselves. As to the better tone, there can be, of course, no doubt as against a larger number of tubes; as to the power obtained, giving that remarkable selectivity and distance so much desired, there will be no doubt when you have heard Philco performance.



The Lowboy

Another Louis XVI design by Albert Carl Mowitz for those who prefer a low cabinet. Has handsomely matched walnut panels. The drop door, when open, forms a convenient arm rest for tuning. Fluted legs and pillars. Very highest grade cabinet construction throughout. This model includes the radio receiver, power supply, built-in aerial, portable ground and Philco Console Grand Speaker.





Color-

Vivid Color!

Spanish Brown

A warm, rich, natural furniture color, shaded in two tones, which will blend perfectly with any interior. Bezel plate in antique bronze finish. Graceful panels and classic outline.



Nile Green

A soft gray-green with just a touch of blue. Flower spray decorations, applied by hand, in properly contrasting shades. Delicate border lines in gold.



Labrador Gray

A beautiful neutral shade, reminiscent of the misty haze of northern coasts. The graceful floral decorations blend beautifully into the background. A conservative, yet highly decorative, effect.



Impressionistic

An unusually harmonious treatment of bright, warm colors in the modern manner, to blend perfectly with the appointments of the ultra-modern home.



Mandarin Red

A warm, bright, yet reserved, color, admirably suited to a walnut or mahogany interior. Hand-decorated floral designs in contrasting shades. Panels outlined in gold.

EACH day sees the modern home yielding more and more to the spell of stimulating color—in draperies, in wall and floor coverings, in all the furnishings of living room, bedroom and kitchen. The solemnity of the past is gone for good. Today color is sought in a multitude of objects that yesterday were thought suited only to a dull or somber dress.

As a timely response to this color trend of the day, the Philco "Neutrodyne-Plus" Radio has been placed in cabinets of color. And to give free rein to individual taste, these cabinets are offered in a variety of hand-decorated, two-tone effects, each model captivating in beauty and charm.

These cabinets are of specially drawn radio metal. The dignified design of classic outline was created by Hollingsworth Pearce, a leading authority on interior decoration. The color effects were created by Mlle. Messaros, one of the foremost colorists in the decorative arts, and are applied *by hand* under her personal direction.

Each cabinet stands forth as a highly artistic ornament on its own account, exquisite in its classic line, softly modulated in color—a superb example of beauty and refinement in tint and outline. The dimensions are only 24 inches long, 11½ inches wide and 8 inches high.

The Philco Speaker

THE Philco set faithfully transmits to the Speaker the whole musical range from high to low—soprano, alto, tenor, baritone and bass. However, it is vitally necessary that the Speaker have a reproduction range from high to low which is as great as the range of the set. Otherwise many notes high or low, or both, which may be faithfully coming through the set, will be entirely cut off by the Speaker.

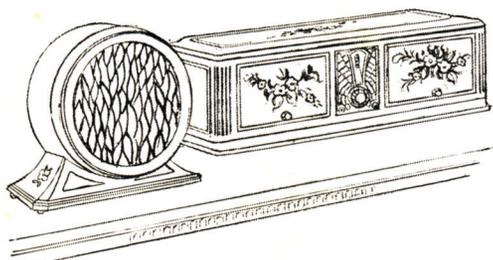
Philco engineers have spent almost as much time perfecting the Philco Speaker as they have in perfecting Neutrodyne-Plus. We believe you will find the Philco Speaker a fitting companion to Neutrodyne-Plus. Everything that Neutrodyne-Plus transmits to it, the Philco Speaker reproduces in full, round, clear, natural tone.

The Philco Speaker gives emphasis to natural sound. A tonal depth, a uniform resonance, a true articulation which is *new* to radio. It captures the extremely high and the deeply low vibrations with equal facility; *perfect reproduction over the entire musical scale*. It brings forth the minutest details, the most delicate shadings of instrument or voice.

During orchestral selections—a severe test—its performance is especially pleasing. Accompaniments are heard which ordinarily are lost or distorted in reproduction. Each instrument retains its identity and character as in the original performance. Drum notes are clearly heard. The soft, low tones of the viola are plainly audible. Piano tones are surprisingly life-like—surprising, because such absolute fidelity, such RE-production, hitherto has been unknown in radio.

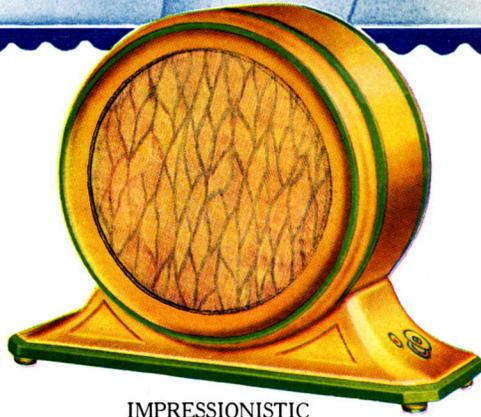
Speakers in Color, Too

The Mantel Model of the Philco Speaker is offered in a variety of exquisite colors to match the hand-decorated Philco table cabinets as well as to harmonize with the decorative plan of any home: Labrador Gray, Nile Green, Mandarin Red, Impressionistic





NILE GREEN



IMPRESSIONISTIC

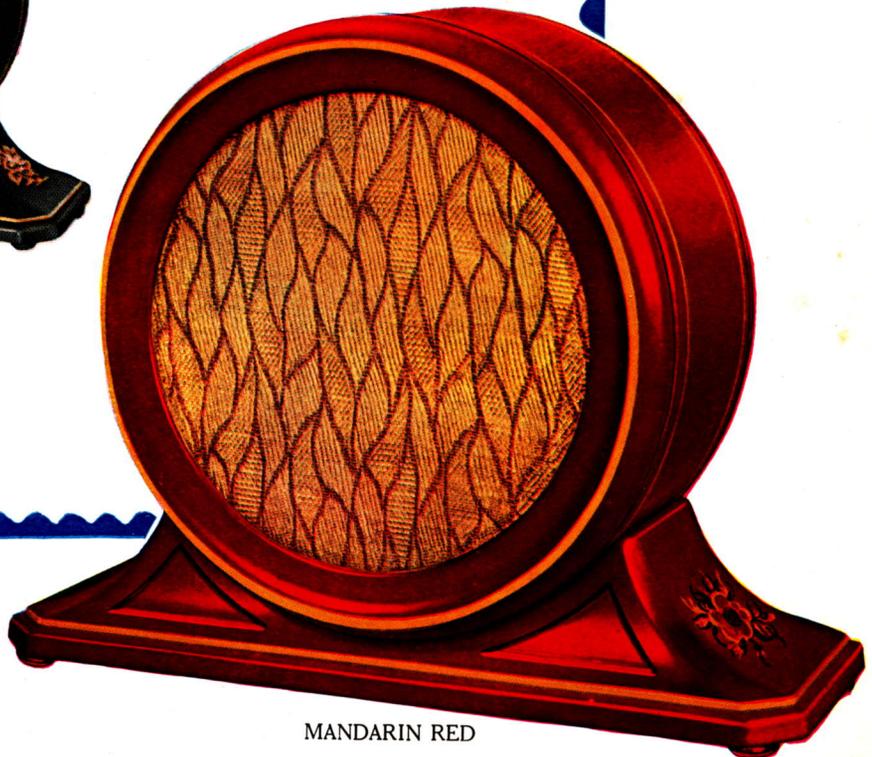


SPANISH BROWN



LABRADOR GRAY

The
Mantel
Model



MANDARIN RED

and rich Spanish Brown. Each bears in its decorative design the handiwork of the same talented artists who created the Philco cabinet designs.

The Philco Speaker is of the magnetic cone type, with balanced armature and other exclusive Philco developments. The Mantel Model encasement is done in a ship's bell-clock motif, extremely graceful and decorative in appearance. Because of novel principles in design, this Philco Speaker—compact and attractive in size—actually gives greater volume as well as greater tonal range than has characterized the very large, unwieldy speakers of the past.

Improved Reception on Any Radio

While the Philco Speaker was developed so that users might fully enjoy the advantages of Neutrodyne-Plus performance, actual tests have shown that it *improves the quality of reception of any set*. It brings out the very best in any radio.

In perfecting the Philco Neutrodyne-Plus Electric Radio and Philco Speaker, Philco engineers have raised the standard of radio reception to a point that will change your entire conception of what perfect radio performance should be. Words are really inadequate to describe the marvelous RE-production of tone that is now yours to enjoy.

Hear the Philco Neutrodyne-Plus Radio Set and the Philco Speaker in your home. You will then be convinced that never before in the annals of radio has such outstanding perfection been achieved.

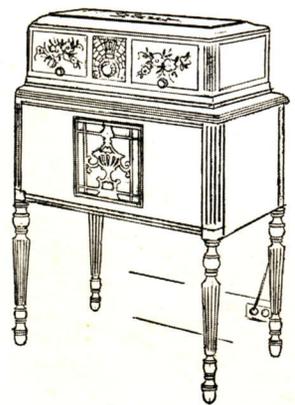
The Console Grand Speaker

The very ultimate in Speaker reproduction is attained in the Philco Console Grand Speaker Table, shown on the opposite page. The specially designed tone chamber, which contains the Speaker, gives amazing emphasis to the life-like quality of tone. A volume, a depth, a resonance which can be compared to nothing less than the actual performance before the microphone. Made of selected walnut panels, with precise care and handsome finish. Fluted legs and pillars. A beautiful piece of furniture to support any table model radio—and at a remarkably low price.



The
Console Grand
Speaker

The Philco Console Grand Speaker serves as a pleasing support for any table model radio. The illustration below shows a Philco Hand-Decorated Table Cabinet in position on the Speaker. Any of the five colors blend harmoniously with its handsomely matched walnut panels.



And—This Quality Radio at Most Attractive Prices

THE Philco varies in price, depending upon the particular model you choose. The price, however, is based upon the cabinet and *not* upon the set; because the *same instrument* is installed in all the cabinets from the highest to the lowest price. Therefore, from the standpoint of performance, there is only one Philco—the *best*.

Thus, no matter what price you choose to pay, you are sure always of the utmost in Philco “Neutrodyne-Plus” performance.

Philco has managed to produce its super-quality set in exquisite furniture models at surprisingly moderate prices. But more important still, this same instrument has been installed in exquisitely decorated table cabinets to sell at popular prices. These table models possess all the advantages of the higher priced furniture models in convenience and performance. Without doubt they constitute the biggest value in radio today!

Only in Philco Cabinets Can Full “Neutrodyne-Plus” Performance Be Secured

The full measure of Philco’s amazing performance is made certain by the combination of the Philco Radio Chassis in a Philco Cabinet. Philco sets are especially fitted into Philco Cabinets. The cabinets are properly shielded and grounded to co-ordinate with and bring out the best in the Philco circuit.

The Speakers are housed in specially designed tone chambers which bring out that wonderfully life-like quality of tone.

Philco Cabinets bear the Philco protective seal. Look for it. This seal is your assurance of *full* Neutrodyne-Plus performance.



The Philco
Protective
Seal



A view from the broadcasting station during the Philco Hour, showing Jessica Dragonette, soprano; Harold Sanford, musical director; and Henry M. Neely, Production Manager, who assumes the role of Philco's "Old Stager."

The Philco Hour

Philco, in its "Philco Hour," was the first to broadcast over the entire country in the chain programs of the National Broadcasting Company. "Memories of the Theatre," producing the complete story and musical selections from the musical comedies and light operas of by-gone days, is a feature that millions await with keen interest. More letters are received by the National Broadcasting Company from listeners on the "Philco Hour" than any other single feature in the chain.

Philco will continue its national broadcasting every week without interruption throughout the year, on Wednesday evenings (Pacific Coast, Thursday evenings) during the summer; on Saturday evenings during the fall and winter, at 9 o'clock eastern time, 8 o'clock central and 9 o'clock Pacific Coast time from the following 36 stations throughout the country.

WJZ	New York	KWK	St. Louis	WRC	Washington	WTIC	Hartford
WBZA	Boston	WREN	Kansas City	WFAA	Dallas-Ft. Worth	WJAR	Providence
WBZ	Springfield	WCCO	Minneapolis	WOC	Davenport	WTAG	Worcester
WBAL	Baltimore	WTMJ	Milwaukee	WHO	Des Moines	WCSH	Portland, Me.
WHAM	Rochester	WHAS	Louisville	WOW	Omaha	KPO-KGO	San Francisco
KDKA	Pittsburgh	WMC	Memphis	KOA	Denver	KGW	Portland, Ore.
WJR	Detroit	WSB	Atlanta	WSM	Nashville	KOMO	Seattle
WLW	Cincinnati	WBT	Charlotte	KPRC	Houston	KHQ	Spokane
KYW	Chicago	KVOO	Tulsa-Oklahoma City	WOAI	San Antonio	KFI	Los Angeles



A Product of Radio's Greatest Scientists

PHILCO combines the achievements of the foremost research engineers in the world of radio. It is licensed under the patents of Radio Corporation of America, The General Electric Company, The Westinghouse Electric and Manufacturing Company, The American Telephone and Telegraph Company, The Latour Corporation, Lowell and Dunmore, Hogan, Lektophone and the Hazeltine Corporation.

And to these have been added the "Neurodyne-Plus" discoveries of the three Philco engineers who direct the Philco engineering and research organization—Walter E. Holland, W. H. Grimditch and L. J. Pearson, men who rank among the foremost in their profession.

PHILCO

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Electric

RADIO