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PHILCO NEWS

Sales News for America's Most Alert Radio Merchants

Vol. II

SEPTEMBER, 1931

No. 6

Greatest of all Radios!
PHILCO
ELEVEN TUBE BALANCED UNIT ELEVEN TUBE
SUPERHETERODYNE-PLUS

PHILCO
Eleven Tube
Balanced Unit
Superheterodyne-Plus

AUTOMATIC
VOLUME
CONTROL

OVERSIZE
ELECTRO-DYNAMIC
SPEAKER

TONE CONTROL
AND STATIC
MODIFIER

TREMENDOUS
VOLUME

PHILCO
Eleven Tube
Balanced Unit
Superheterodyne-Plus

FURNITURE BY
NORMAN
DEL GEDDES

ILLUMINATED
STATION
RECORDING DIAL

SHARP TUNING
AT ALL POINTS

TRUE
CLEAR
TONE

IT TAKES A BALANCED SUPERHETERODYNE
TO MEET PRESENT DAY CROWDED BROADCASTING CONDITIONS

This is the September Window Display

IN THIS ISSUE: More Philcos Now Being Sold Than All Others Combined—Announcing Two Amazing New Values!—They're Nothing But Junk in a Bonfire—Selling Up—The New 1932 Line—"A Ride Makes the Sale—and a Salesman for You"—Millions and Millions of Magazine Ads are Selling Philco Balanced Tubes—Remarkable New Philco Radio Clock—Philco Retail Salesmanship—Retail Operating and Selling Methods—Philco Radio Service—Philco Radio Service Page—New 24-Sheet Poster—Haynes' Philco Radio Logs—Novelty Catalog

Announcing . . . *Two Amazing New Values!*

The Philco Five-Tube T.R.F. In a Baby Grand and a Lowboy

A GAIN, in startling fashion, Philco meets fully and promptly its obligation to Philco dealers, to provide the *right* set at the *right* time. Now, with a tendency on the part of manufacturers to place before the public three- and four-tube sets of inferior performance, Philco steps out and puts in your hands a two-edged sword in the form of these two new 5-tube models. Use this weapon right, and it will pay you two ways.

Here's a Leader that is a Leader!

Not a compromise! Not a "cheap" set, with tubes skimmed down to the point where the set can't deliver any more than backyard performance!

But the greatest value of all time in price, performance and eye-appeal. Read the features in the panel alongside; here are things that achieve for this set the same range of power and performance as the Philco Baby Grand delivered last year.

Electro-Dynamic Speaker! Not three tubes, nor four tubes . . . but FIVE PHILCO BALANCED TUBES, including Pentode Power Tube! Triple Screen Grid! Handsome Mahogany Cabinet! Three Tuned Circuits!

And What a Price!

Only \$36.50 for the Baby Grand!
Only \$49.95 for the Lowboy! Never before have you been given such a drawing card to pull people into your stores. Never such a chance to sell a good set to the hitherto untouched market that cannot afford to pay \$50 for a Superheterodyne. Never such a "natural" for college students, offices, and "a set in every room." Never before such an opportunity to get people into your store and **SELL THEM UP!**



The Philco T.R.F. Baby Grand Radio
\$36.50—Complete with 5 Tubes

quality radio sets. Every radio dealer *must* be vitally interested from the standpoint of his own survival.

Three-tube sets, four-tube sets, off brand sets, private label sets—they threaten the whole quality- and profit-structure of your business.

Non-radio outlets—such as cigar and drug store chains—sell these cheap sets as **LEADERS**, *without*

This Set Will Bury the Latest Radio Bogey

Meet competition with Philco Quality—stop the public from passing your store to buy cheap sets at drug stores, cigar stores and other non-radio outlets.

Every radio dealer knows the menace of low-price, cheap

regard to profit, to attract customers for their other merchandise. These sets do not give performance satisfaction. So they hurt radio business. They hurt the dealer directly, because customers look to him for service and satisfaction, no matter how low the price. They drain away *customer volume* from the established radio dealer. They remove customers from the field of legitimate radio purchase.

Read This Description

Note Features—Beauty—Price

- 1 Priced complete with FIVE (5) tubes, including new Pentode Power Tube and using THREE tuning condensers.
- 2 Genuine Electro-Dynamic Speaker, giving remarkably pure clarity of tone.
- 3 Genuine mahogany cabinets of graceful design and unusual beauty.
- 4 All-round performance that actually surpasses last year's Baby Grand—the world's greatest seller in 1930.
- 5 And remember, the name PHILCO—meaning Philco quality—meaning public acceptance—a name supported by the largest national advertising of any radio in the world.
- 6 More radio—more tubes—more power—more performance, and finer cabinet quality than have ever before been offered at anywhere near such remarkable prices.

Act Now—to End This Menace

The public wants Superheterodyne. Nevertheless sales are being made at lower prices to:

1. People who want a radio in every room.
2. People who can't afford \$50 for a radio.
3. People who would be customers for Superheterodyne, but are sold on *price*, taking the irresponsible claims of off-channel dealers, for *quality*.

Every radio dealer must realize this situation, and co-operate to meet it. He can't stop it by *ignoring* it. He must meet it on its own ground—with overwhelming quality—PLUS PRICE APPEAL.

And Philco must help its dealers stop this trend away from established radio dealers—check its growth—by simply giving Philco Quality at extreme low

prices. You can't **SELL UP** if you never see prospective customers.

Philco does not intend to sell through off-channel radio outlets. How much more important that established radio dealers should avoid handling products made only with an eye to this cheap, undermining competition.

Imperative Now—to Sell Up!

Use it right and the T. R. F. will bring you a volume that you can convert to profits. Don't sell a T. R. F. set where you can sell a 7-tube Baby Grand, Lazyboy or Highboy. Don't sell a 7-tube set where you can just as easily sell a 9-tube Philco. Don't sell a 9-tube set where you can sell the 11-tube Superheterodyne-Plus.

That is what we mean by **SELLING UP**.

That is keen merchandising. That is the way the most successful and biggest money-making dealers get their extra profits.

We have no wish to push the T. R. F. radio. We do not urge you to push it. But you must have its wider sweep to bring in more customers. Dealers need its **POWER** and **DEFENSE** against the effort now going



The Philco T.R.F. Lowboy Radio
\$49.95—Complete with 5 Tubes



on to divert radio business to other channels. So we must build, and dealers should stock these sets in adequate quantity, for ready ammunition.

Philco's line for 1931 is the HOTTEST in radio history! The public is buying twice as many Philcos as ever before. Philco intends to insure for its dealers every help in merchandising this line to the biggest volume Philco dealers ever knew, and to secure higher average unit sales and profits by intelligent SELLING UP.

You will see the Philco advertising—and the entire public will see it—on the new T. R. F. set. It says in effect: "Here is Philco T. R. F. Quality at a Price—but you really need Philco Superheterodyne Quality, at a little higher price, for present-day crowded broadcasting conditions."

And that should be the keynote of your own merchandising effort

in SELLING UP from the T. R. F. to your higher-priced, high-profit Philcos.

After all the majority of the public wants the best. And the Philco Superheterodynes give the greatest performance, value and customer satisfaction in history.

Remember your profits come from two sources:

1. From the high volume of business that is attracted by quality and price to your store.
2. From the higher-price sales, that you, as an intelligent merchant, create out of this volume.

Both kinds of profit are absolutely necessary to your prosperity.

Place your orders for Philco T. R. F. sets at once. Don't let sales get away to other channels—don't encourage this dangerous trend by inaction.



Window of
Union May-Stern
Co. in St. Louis



Sanders Radio Co.
Philco Window in
Kansas City

They're Nothing But Junk in a Bonfire

Why Not Spread Happiness With Your Trade-Ins?

They'll Do Some Real Good in the Homes of the Blind

Put Them There and Not on Your Inventory!

THERE are hours of solid enjoyment left in the sets your customers turn in when they buy their new Philcos. Of course, they're obsolete and worn out, and their cabinets, if any, are scratched from use, but they'll still pick up local stations with a fair degree of accuracy.

They're no good to you; it's hard to resell them at a dime a dozen—yet customers drag them to you when buying a new set. *What do you do with them?*

Up to date, the final resting place of these antiques has frequently been a monster bonfire, into which is dumped every trade-in set the dealer has taken in during the past six months of business. A couple of gallons of gasoline, a lot of smoke with passersby watching at a respectful distance, a twisted pile of steel and wire, and nothing is left but scrap.

Pretty wasteful proposition, isn't it?

Here's a real, upstanding idea—an idea with a heart! It was first suggested to Philco by the New York Association for the Blind; it keeps the trade-in receivers out of your storerooms and makes them go to work where they'll do the most good. Philco broadcast the blind organization's suggestion and received so much commendation that we're passing the idea on to you.

Are you willing to show the world the radio business has a heart?

That single letter from the Association for the Blind gives the story in a nutshell. Here it is:

"We are appealing to you to help us solve one of our greatest problems—in keeping our blind people happy and cheerful by recreation and education. The serious depression of spirit that follows blindness can be alleviated by installing radios in the homes of these blind people. For two years it has been impossible to meet the overwhelming demand by our blind people for radios, and donations for this purpose have been small.

"We feel sure you will want to help us bring happiness to those who are not only blind, but who because of other disabilities are unable to leave their homes. Will you not broadcast this appeal to your radio audience, presenting this request: 'When you buy your new radio, donate your old one to the Association for the Blind.'"

Philco broadcast this plea of the organization for the blind during a nationwide broadcast, with splendid results.

Why can't you go a step further?

When a customer comes into your store, picks out his new model and offers you his old set as a trade-in, suggest to him that he do a real act of charity and donate his old set to a local charitable organization. Tell him that you will arrange for his old receiver to be picked up and installed in the home of some blind person, where it will give hours of pleasure to some one who is shut in eternal darkness.

Haven't you ever shut your eyes and shuddered at the thought that some day you might be blind? So has your prospect, and it will be easy for him to see how much good he can do with his old set. Blindness is one of the most soul-searing afflictions man can suffer, and it is easy to realize what a magic tuning dial that brings the whole world into the room can mean to a sightless shut-in whose sole recreation has been his own thoughts.

Making arrangements with your local charitable organization is easy. They will jump at the chance to help the unfortunates in their care, and will gladly arrange to cart sets from any place you designate to the home of a blind person in your town. Get a letter from the secretary of the organization when you make your offer to him—it will show the prospect that you are acting in good faith.

If you do not know the name of the organization in your town caring for the blind, write to us. The Association for the Blind has offered to co-operate nationally with Philco in this great humanitarian movement, and we will see that arrangements are made for the proper disposal of sets. If there is no blind organization in your vicinity, arrangements can be made with your local hospital, veterans' home or orphan asylum.

Everybody concerned in the exchange benefits—you, your customer and the recipient. The main point is—those sets can give some unfortunate hours of pleasure. Let's see he gets it!



The Wurlitzer Store Philco Display
San Francisco

Selling Up

the Secret of Profit in this Greatest Philco Line !

SELL UP!

A MILLION SETS in seven months is the goal. But REAL SUCCESS means most of these ABOVE the Baby Grand. That is the keynote of the whole Philco plan, in the greatest campaign the industry ever saw.

Each step is plain as a pattern, for everyone to see. The merchandise is built for it—priced for it. Quotas are set for it. Dealer profits based on it. The organization tuned for it. The whole advertising theme and weight are squarely behind it.

To Neglect It Is Dangerous

Bluntly—if you, as a dealer, neglect to SELL UP, your profits must suffer, perhaps to the danger point. And you will completely fail to realize the *opportunity* of the greatest line and program in Philco history.

No dealer organization in the industry is so effectively organized, so specially equipped by training and experience, as that of Philco, to do a real job of *selling up*. And no merchandise like Philco's is READY MADE for it!

From top to bottom of the line Philco models possess tremendous appeal in Quality, Value and Price. Every model is VALUED and PRICED to facilitate the easy stepping up of buyers to a *higher bracket*.

The line is so graduated that it is an easy matter to sell up from the 5-tube Baby Grand to the 7-tube Baby Grand to the 9-tube or 11-tube sets, because every model represents VALUE—the very best radio for the money.

The Higher Bracket for Every Sale

It should be the fundamental determination of every dealer—every salesman—to SELL THE BRACKET HIGHER THAN THE PROSPECT NOMINATES! And success is principally a matter of keeping that resolution present in every sale. The most successful and biggest money makers among Philco dealers make their EXTRA PROFITS just that way.

You will not convert *all* to the higher cost merchandise. But you will be amazed at the way your

dollar volume jumps. The merchants who excel in every line are simply expert in selling the customer *something better* for more money.

The new Philcos are priced so that the *cost difference* between each model and the next higher is very small. The difference in VALUE, though, is big, purposely on the side of the higher bracket, and perfectly plain to the buyer. Moreover, when this small price difference is spread over a number of installments, it is almost negligible to the average buyer.

Yet, in the total it means everything to you—the difference between BIG PROFITS and merely getting by.

Today, more than ever, the radio dealer must be known to his community as a specialist, competent to advise prospects on their radio requirements.

Be the Radio Specialist of Your Community

You do a customer no real service when you take the first suggestion to sell him a Baby Grand. Probably his real desire is for something much better. And when you carry this would-be purchaser up to a 9-tube or 11-tube Philco, you have set the style standard of his neighborhood and circle of friends.

That is the reason there are big-set localities and small-set localities—simply the difference in the enterprise of dealers, SELLING UP. And don't ever forget that this different standard also means a completely different standard of *dealer prosperity*.

Remember that the larger Philco sets offer the customer just as much value. They can be purchased on easy and convenient terms. Once in the home, the larger set is going to be more satisfying to own, and a far greater advertiser of Philco quality and prestige.

Big-Set Profits Easy to Get

You'll find big-set profits are surprisingly easy to get, and enormously greater in the total, if you go after every prospect with the idea of selling him greater radio satisfaction in a larger Philco set.



Philco Dealer Meeting of Greenlease-Lied, of Omaha, Nebraska

September, 1931

Philco has made its great records of the past two years in the face of the economic depression. Now, all signs seem favorable for the start of the upturn. Once assured that the upturn has begun, there are millions of dollars in the savings that will be released for the satisfaction of wants that the average American family has been denying itself.

No one can question that among the first of these will be *more radios, better radios, bigger radios.* Everyone

recognizes the undisputed leadership of Philco in Value, Performance and Price.

This year its supremacy excels its past leadership by spectacular margins.

The new Philco line will attract more customers than ever to your store. Remember that every one you can SELL UP is a better satisfied owner and booster for Philco. And he puts your *average sale price* higher, which is absolutely necessary for your real prosperity.

The New 1932 Philco Line

NEVER before has there been offered a line of quality radio which is so complete and so representative of outstanding value as the new 1932 Philco models. 7 tubes, 9 tubes and 11 tubes, all superheterodynes; also a 5-tube T.R.F. — cover the complete field at prices far below competition.

Model 50—See full details, page 2 of this issue, on the new Model 50 Baby Grand and Lowboy.

Model 70—Outstanding money value in the lower-price field is available in the marvelous new Philco 7-tube Superheterodyne, Model 70.

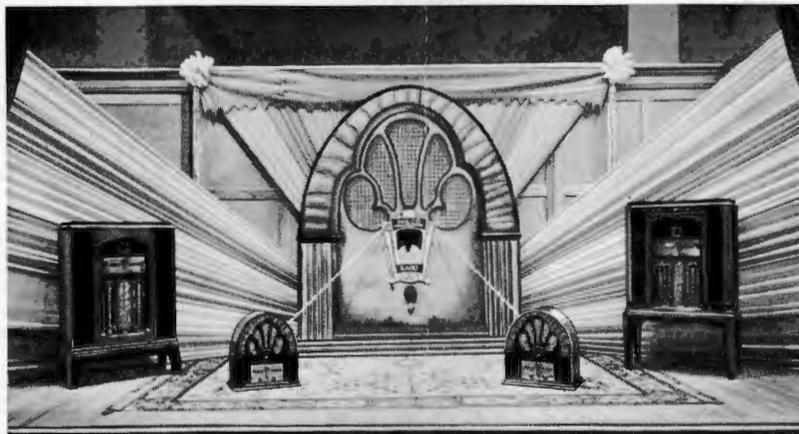
The "Lazyboy," which contains the 70 chassis, is new, is distinctive, and is a marked advance in modern radio design. This model in the utility cabinet with recessed controls on the top will undoubtedly be one of the biggest sellers in the new Philco line. The simplicity, both with respect to the appearance and operation, further enhances the desirability of this model for the customer who wants a radio set that is different.

The Highboy Model 70 is for those who prefer the more conventional radio furniture design. The Model 270, the largest of the 70 series, combines the radio with electric phonograph in a beautiful Highboy cabinet. Baby Grand Model 70 represents the biggest amount of radio for the smallest amount of money it is possible to buy.

A new Speaker is employed in the Model 70 which is similar in appearance to that used in the Model 20. An improved type of center and edge support construction in the Speaker cone affords far superior tone and efficiency. The cone center is cut out in such a way that perfect support is obtained with extreme flexibility, thus affording small resistance to the relatively large impulses of the bass notes.

The Model 70 has a two-position Tone Control—"brilliant" and "mellow"—the improved new electro-dynamic Speaker, and the exclusive Philco illuminated station Recording Dial with the glowing arrow indicator. It uses four screen grid tubes, type 24; one type 27 tube; the new type 47 pentode power output tube; and the 80 tube as rectifier.

Model 90—The new Model 90 Philco Radio is a remarkable nine-tube Superheterodyne containing many features of the most advanced radio design. One of the most important of these is the double tuned input circuit,



Philco Baby Grand Jumbo Window Display of Sterchi Brothers of Nashville

which affords extremely high selectivity, even with a long aerial. This model is available in three styles, the Lowboy, the Highboy and the Baby Grand. The two large instruments are equipped with the oversize electro-dynamic Speaker, which produces tone of utmost brilliance and fidelity.

The 90 Superheterodyne contains one stage of radio frequency amplification, an oscillator, a first detector, one stage of I. F. amplification, a second detector, a

first audio, a power stage of two push-pull 45 tubes and a type 80 tube as rectifier.

Four-point Tone Control, 45 type power tubes in push-pull, improved new electro-dynamic Speaker, range switch, and Philco illuminated station Recording Dial with glowing arrow indicator are some of the additional features which make this big performing set so outstanding.

Model 112—Radio performance not to be equalled on the open market, regardless of price, is available in the Model 112, the new Philco Superheterodyne-Plus. The three different cabinets in which this wonderful instrument is available—Lowboy—Highboy—and Radio-Phonograph with automatic record changer—are all creations of the famous artist and designer, Norman Bel Geddes.

The Model 112 contains all of the features which are consistent with modern broadcasting conditions. The powerful screen grid tubes and the superheterodyne circuit are factors which make the sensitivity and selectivity outstanding. The range switch, provided for the distance fan, affords an increase in sensitivity from the normal range to a point where the weakest distant stations can be heard. Automatic volume control, one of the outstanding features of Philco Radio, enables the listener to enjoy a program from a distant station without fading, and, perhaps even more important, to tune in a local station without ear-splitting blast of excessive volume. Philco four-point Tone Control, the two 45 type push-pull power tubes, and the improved new dynamic Speaker all contribute to the reproduction of undistorted tone, so characteristic of Philco Balanced-Unit Radio.

Here is a line of radio that is the greatest in Philco history. It is one which every Philco dealer has welcomed as a source of bigger profits, and one which is not only 100 per cent technically correct, but which is also 100 per cent correct from its value appeal.

"A Ride Makes the Sale— and a Salesman for You"

Say Philco-Transitone Dealers

PHILCO-TRANSITONE demonstrating cars are hauling in orders—Buyers become Philco boosters and demonstrators—Each sale often leads to two more, and develops prospects for Philco home radio in addition—These are the peak months—Hit 'em hard for the biggest radio summer you've known!

Philco-Transitone has gone over big—bigger than any of us expected! Many territories are far above quota—and not because of any favorable "conditions." Dealers simply have put Transitone in their cars—advertised

—given demonstration radio-rides—parked their cars with the radio playing to attract prospects—and made sales right and left.

Purchasers, in turn, have driven around "showing off" and arousing tremendous interest; they've praised Philco-Transitone to countless friends, they've taken their friends for radio-rides; the friends have come in to have radios put in their cars, too. Many Philco home radio prospects have also been uncovered—prospects it would have been difficult to locate in any other way.

No wonder all the dealers who are pushing Philco-Transitone are enthusiastic—they have an added "sales force" of user-boosters working night

and day for them without commission! They say "A ride makes the sale—and a salesman."

This is the Peak Season for Profits

With continuous Philco radio broadcasts on Transitone week after week, a succession of full-page *Saturday Evening Post* advertisements exclusively on Philco-Transitone—and prominent mention in hundreds of thousands of dollars' worth of other Philco national advertising, Philco-Transitone has had and is continuing to get enormous publicity.

Furthermore, Philco-Transitone is featured big by car manufacturers, adding an endorsement no other Automobile Radio has ever received. Dodge dealers started in May to make a big play on Philco-Transitone. National advertisements of several motor car companies mention Philco-Transitone.

Studebaker, commencing about June 15, is featuring Philco-Transitone all over the country, including a smashing write-up in their magazine mailed to all Studebaker owners.

Philco-Transitone publicity is building up to a peak right now at your peak season for cashing in. Summer months—July, August, September—are THE months.

**No Trade-ins
No Free Trials—
Nothing but Clean,
Extra Profit.**

Suddenly your market for radio sales has been DOUBLED! There are as many cars as there are homes in your locality. And now these cars are minimum \$99.80 radio prospects.

The average family spends about 35 per cent of its leisure time in the automobile—the car is a room of the home on wheels. Yet that rolling room has no radio. What an opportunity! No old radio to trade in, no necessity to put in a set on trial—"a ride makes the sale"—and it's a \$99.80 sale at least.

All the profit is clean—with less sales expense—and no delivery cost.

Cash in While Curiosity is at High Pitch

Many people have seen Automobile Radio advertised—have heard about it over the radio at home—have heard friends speak of it—have heard passing cars playing music—but comparatively few people have yet taken their first radio-ride.

Curiosity will never again be so keen as it is this summer. It's the easiest thing in the world to get prospects to accept Philco-Transitone demonstrations—right now. Also you have competition practically at a standstill—with performance that is beyond comparison and Philco's famously successful Automatic Volume Control.

It's a "made-to-order" condition for you. Opportunity is certainly opportuning you—paging you—begging to be seized. A like situation has never before existed. Grab it!

EXTRA!

Philco-Transitone is now optional standard equipment at the factory on the following automobiles:

- CHRYSLER
- DE SOTO
- DODGE
- PLYMOUTH
- PIERCE-ARROW
- STUDEBAKER

It is the ONLY Automobile Radio their engineers approve and recommend. Studebaker and Pierce-Arrow, the latest additions to the list, thoroughly tested out all important makes of automobile radio before selecting Philco-Transitone!

Watch this list grow!



Philco Transitone and Set Display, Wanamaker's, Philadelphia

Millions and Millions of Magazine Ads are Selling Philco Balanced Tubes

Hook Up Your Own Selling Effort to Cash In
These Extra Profits—Philco Balanced Tubes
Better the Performance of Any Radio!

MILLIONS and millions of Philco ads are driving that fact home to radio owners and buyers. Every Philco advertisement—every billboard—every broadcasting program, on national or local hook-up—is making the public more conscious of the quality and advantages of Philco Balanced Tubes.

And Philco tube sales are already responding tremendously. Some sections are doubling and trebling their best records of the past. It is evident everywhere that this is going to be overwhelmingly the biggest year ever seen in Philco tube business.

Be sure you get your share of profits this opportunity affords.

Philco is the world's largest maker and seller of radio. It is now doubling its greatest past sales records. And tube sales, nationally—and your own individually—should increase in just the same, or greater, proportion.

Radio users everywhere—even owners of other makes—are increasingly aware that Philco tubes are superior in giving true, clear-toned performance. So it is simply a question of going after the business to see your Sales and Profits SOAR from this important item.

Some territories, in the first half of this year sold more than 200 per cent of quota, while others were getting but 50 per cent and lower. This sharp contrast

of sales to quota is so spotted that it can spell nothing but difference in attention and effort applied. It illustrates the whole story of NEGLECTING against CULTIVATING this market.

You are going to want all the profits you can get from your radio business this year. It runs into real money when you go after it. And when you have sold a prospect Philco Balanced Tubes as a replacement you are making a future customer for a Philco radio, when he is ready for a new set.

The high quality, sturdy construction and precision design of Philco tubes will increase the efficiency of any set. And since you must sell some tubes, be sure to concentrate on the kind that give you the greatest public good will as well as NET profit.

Philco tubes are never "gypped," never dumped in your territory, never a drug on the market. The

same controlled production protects you in them as in Philco radio sets.

With the new complete line—with more advertising power behind them than any tube ever had—with the greatest acceptance for the Philco name of any in radio—there is no reason why you shouldn't cut your share in these big *extra* radio profits—as others are doing—beginning RIGHT NOW!



Albert Lipson & Sons, Elizabeth, N. J., give Philco Tubes
Prominence in Their Window Display

Remarkable New *Philco Radio Clock* Operates Any Radio Set Automatically

A Precision Timekeeper of Rugged Construction—Wonderful New Market for Radio Dealers Now Opened Up by Amazing Philco Development

AND now Philco invades another field with an electric time-keeper which also turns any radio set on and off automatically at any time the user desires. Without doubt, this new Philco product is the greatest contribution ever made to the radio accessory field.

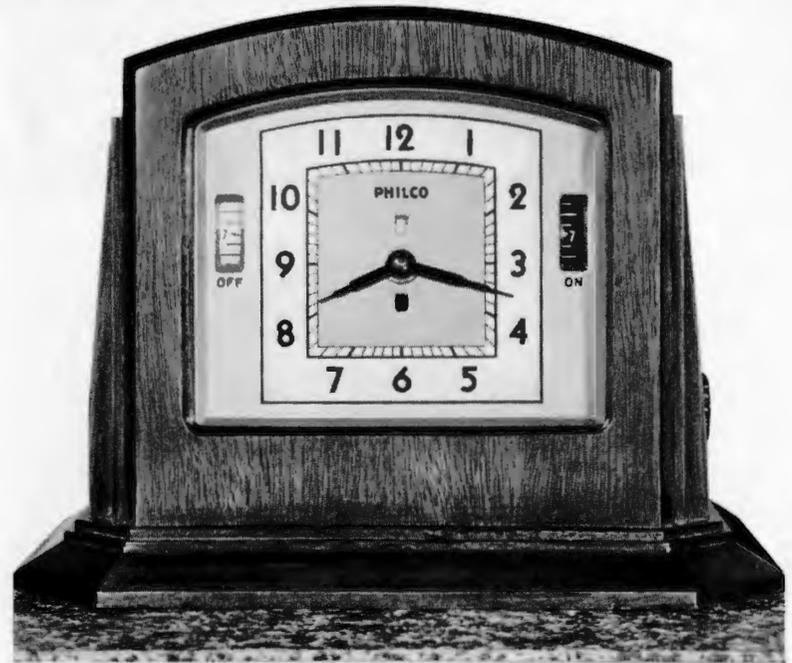
Hundreds of thousands of electric clocks have been sold during the past few months, and the market is not even scratched. Think of it—there are nearly twenty-one million wired homes in the United States, and every one of them needs accurate time.

Millions and millions of home owners will buy electric clocks within the next few years, and Philco will give you hot, salable merchandise, always at a price less than the customer expects to pay.

Now to add to the utility and value of an electric clock, Philco has made a remarkable new development. They have combined a durable, rugged electric clock movement with an automatic switching device, which is almost uncanny in its accuracy and performance. Think of it! When you retire at night set the dial on the Philco Radio Clock at the hour at which you wish to be awakened to radio music. The dials of the Philco Radio Clock are graduated for 15-minute program intervals. *And the switching mechanism is accurate!—it even gives the tubes time to heat up.* You get the entire program. No uncertainty! No disappointments! Accurate electric time and accurate electric radio control, automatic and never failing. And yet the price of this new Philco radio accessory is only \$17.50, and at regular Philco discounts

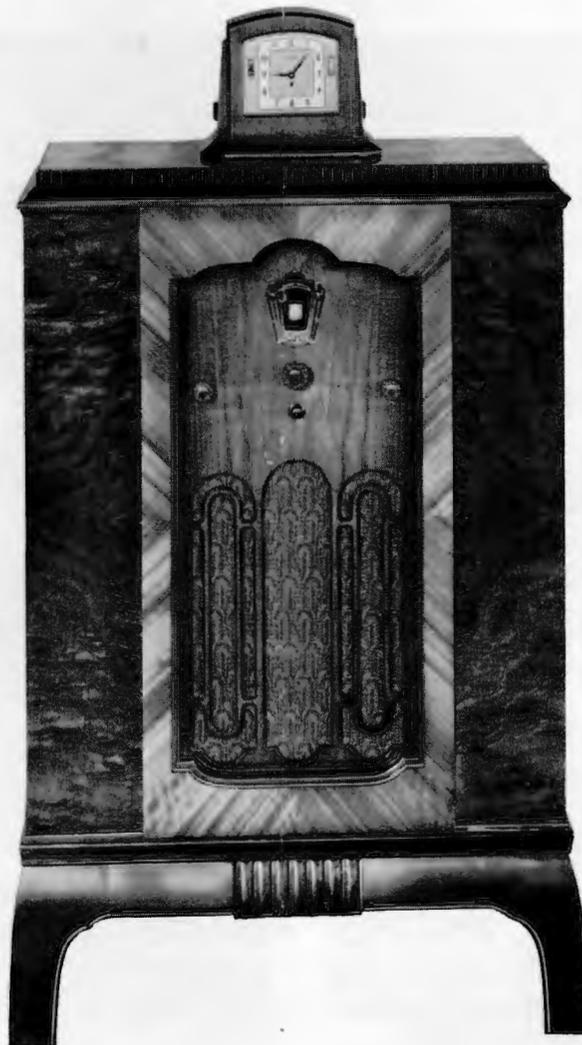
The Philco Radio Clock is as unusual and beautiful in appearance as it is marvelous in operation. The face design and the cabinet are the creation of Norman Bel Geddes, foremost American artist and originator. The face is silver plated in two shades, giving a pleasing contrast to the oxidized black figures and graduations. The case is semi-modernistic in design of solid mahogany of exquisite grain, which is fully brought out by careful hand rubbing. There are two small openings in the face; one to indicate whether or not the time shown is A. M. or P. M., and the other which shows at a glance whether or not the clock is running—it is impossible to tell otherwise, as the mechanism is *absolutely silent*.

It is simplicity itself to automatically control radio programs through the Philco Radio Clock. On each side of the clock body is a knob through which the little dials on the face of the clock are controlled. The clock is set to automatically turn the radio on and off through the use of these knobs. As an example: If the user wishes to be awakened by a program scheduled for 7.00 A. M. and desires that the radio will turn off at 7.15 A. M., he merely sets the "On" dial at 7.00 and the "Off" dial at 7.15. There-



The Philco Radio Clock—Only \$17.50

It will turn the Radio Set and other Electrical Devices of similar nature "On" and "Off"



after the Philco Radio Clock takes complete charge of remembering for him.

Accustomed as we all are to the ruggedness of Philco design as found in their radio receivers, the mechanism of the Philco Radio Clock is a revelation to all who have seen it. A slow-speed synchronous motor is used—the most expensive method of construction, and yet the most accurate. It is absolutely silent in operation, and accurate to a degree never before attained in electric clock manufacture. And the Philco Radio Clock has as an added advantage a manual starting device and warning. If the electric service fails, the clock stops immediately. This is indicated in one of the little windows on the face. The clock is so constructed that it will not start when the current again comes on—it *must be manually reset*. This insures the user always having accurate time, which is not true with many other makes.

Philco again presents the opportunity for the radio dealer to make more money by "selling up." Here is a strictly radio accessory that serves two purposes. Every one of our prospects is interested in radio and everyone is interested in an electric clock because they are two of the new interesting things that are claiming the public attention right at this time. Philco distributors have Philco Radio Clocks in stock for you *now*. Philco advertising on the clock in national publications on the customary business-getting basis is about to be released. Get your full share! Philco Clocks will sell like Philco Radios—the hottest, fastest-selling line in the world.

Philco Retail Salesmanship

SECTION I—GENERAL SELLING DIALOGUE

For Every Man Who Sells Philco at Retail

FIRST, we ask you to accept our cordial greeting as a member of the National Philco family. And we want to assure you that you can depend upon the wholehearted support and co-operation of the entire Philco organization, the distributor, factory representatives and factory executives.

We are glad to have you with us and we trust that you will meet with success far beyond your expectations. We believe you will. We want you to make money and plenty of it, because your success is unquestionably our success.

We will watch with keen interest the progress that you make. You are getting in on the ground floor, so to speak, of new development in radio merchandising. It is the development of "Outside Selling," and therefore your opportunity is tremendous. You will master a big merchandising development in its early stages, and as you win promotion, your value to yourself and to Philco will be correspondingly greater.

Salesmanship as a Career

We are not going to dwell on the many reasons why salesmanship is the biggest, broadest career that a man can select for himself. The fact that you are now a salesman proves that you realize this. However, let us say this—that you can be just as good and just as successful a salesman as you wish to be. Do not let anybody tell you that salesmanship is a matter of natural ability; that men are born salesmen. Such a statement is utter foolishness.

Salesmanship is acquired. It is learned and gradually mastered, and you have just as much opportunity to become one of the world's outstanding salesmen as anybody else.

We submit the following suggestions to you—that you be pleasant and courteous in your contact with prospective customers. Be cordial, smile, and make them like you. Be confident, supremely confident of yourself because there is not the least reason why you should not be.

Above all make it a point to know your merchandise; know the facts concerning your business and what you have to sell, and then learn by study, by asking, and most of all, by steady practice how to present those facts to the buying public intelligently and forcefully.

Study your prospects. Try to know their point of view; what they are thinking of. You can soon learn to analyze the thoughts of your prospective customers—no question whatever about it. And when you learn to do that, you will be amazed at the ease with which you can sell good merchandise. And you always have the satisfying thought back of you that when you are selling Philco you are selling the finest in radio at the most attractive prices.

Remember that a customer always admires the man who has sold him. Battle for your sales and when you sell, you will have gained the respect and admiration of the customer.

As far as the money you can make is concerned, just remember that there is absolutely no limit to the height to which a man can rise in the business of salesmanship. All the industry and commerce of the world is founded on salesmanship. When you hear of the completion of any gigantic business enterprise, such as big mergers, tremendous purchasing of materials by governments or nations, you can rest assured that all of that business is founded on salesmanship. Bear in mind that the business and industrial leaders of America today were primarily, in almost every case, salesmen.

Keep in touch with your market, learn what other radio receivers are being offered, familiarize yourself with their various points and their prices. Then, when a prospect mentions another set you will be in position to point out Philco's superiority instantly. Alertness will be one of your most valuable assets.

The Scope of Radio

In selecting the radio business as your field of selling, you have shown yourself to be a mighty good judge of business opportunity. You have chosen the one business that within the last few years has had a growth without parallel in the history of industry, and a business with more possibilities than any enterprise ever started by man.

Think of it! In 1921, the early days of radio, a total of only 60,000 radio receivers was manufactured, and those 60,000 receivers, scattered throughout the United States, created almost overnight such tremendous public enthusiasm such a tidal wave of demand that last year alone—1930—over \$800,000,000 worth of radio merchandise was sold.

And the surface, so to speak, has only been scratched! Remember, there are 29,000,000 homes in the United States, and 21,000,000 of them are wired for electric service. This means twenty-one million homes are in a position to use all-electric receivers, and the other eight million homes, the great rural and small town areas, will equip with battery-operated receivers.

Now, then, actually less than 15,000,000 radio receivers, of all kinds, makes and ages, are in use today, leaving 14,000,000 homes without radios of any kind.

That condition alone makes a mighty market, a gigantic business opportunity, but more important still is the vital fact that hundreds of thousands of radio receivers each and every year become obsolete and are replaced. The replacement business in automobiles never was and never will be in proportion as great as in the radio business today and tomorrow and the years to come.

And another thing! Think of the possibilities of new engineering developments, sensational startling improvements in radio. It is entirely possible that when you have on your customer list one hundred or three hundred or more satisfied users—people who know you and like you—that suddenly you will be given some new device, directly associated with radio, that you can sell to those same people almost as fast as you can make delivery.

You may in the past have sold other types of merchandise or you may never have sold anything before, but you will agree when we say that it is a tremendous help to a salesman to be selling an article of merchandise that the public is keen about, mighty interested in, and desires strongly to possess. We are all of us in the market for entertainment, happiness, pleasure and contentment, and that is what you are selling today.

Radio has complete public acceptance. The entire family is interested in radio and is boosting for it—father, mother and children. You demonstrate it in the living room of the home, in clean, delightful surroundings. Your very demonstration is entertainment, and your selling talk is newsy and interesting, because it is on the subject of radio, its performance and its marvelous improvements. You are in the "show" business, the entertainment business, and because it is entertainment it is talked about, argued about and sung about everywhere, day and night.

Salesmanship is a great profession, and it is at its greatest in the radio business. Stick to it. Grow with it. Don't be like the men (and there are many of them) who started in the automobile business years ago, dropped it, and look back today over a period of tremendous and profitable expansion that represents only a lost opportunity to them. Make up your mind to be sitting on top of this radio business four or five years from now, when its magnitude will make today's big achievements seem puny.

Philco—World's Largest Selling Radio

You know the enviable position that Philco occupies in the radio industry today. Your decision to join our organization assures us that you recognize that fact. However, let us point out to you, in a paragraph or so, just how remarkably strong Philco does stand today. This is a matter mighty important to you in your present and future prosperity and success.

First, the name Philco has been known all over the world for *twenty-five years* as representing quality and dependability. Philco's prestige is founded on years of successful manufacturing and merchandising.

For years Philco has manufactured automobile starting and lighting batteries, as well as special batteries for industrial and signal purposes. Today the Philco Company—the Philadelphia Storage Battery Company, to be exact—is one of the largest producers of storage batteries in the world. Its first entrance into the radio field was made in a spectacular and most successful manner.

You recall that six or seven years ago practically all radio receivers were battery operated—the days when a storage battery was used as the source of "A" power and had to be continually recharged. "B" power was supplied by dry batteries, and some sets had "C" batteries. These were expensive and wore out rapidly.

At this time Philco, due to its experience in the storage battery business, gave to the world the famous Philco Socket Power. This enabled any radio owner to run his set from a house current electric socket. The Philco Socket Power was a marvel of ingenuity and convenience. It met with such public acceptance that over one million Philco Socket Powers were sold in three years.

The name Philco became synonymous with progressive radio development, and the way was paved for the instant tremendous public acceptance of Philco All-Electric, Balanced-Unit Radio.

The very first year that Philco manufactured All-Electric Radio Receivers it went into twelfth place in the industry. In 1929 Philco took first place and last year—1930—did the most spectacular volume of business in all radio history. Today Philco is the largest producer of radio sets in the world—first, and by a tremendous margin.

You probably have heard the story of the Philco Baby Grand models. How they were introduced at exactly the right moment—how the public received them with instant acceptance and patronage. Month after month the capacity of the factory was increased and still they were unable to supply the ever-rising demand for both furniture models and Baby Grands. Philco is not only the largest and fastest selling radio in the world today—but the line is the most complete. There is a model for every purpose and every pocket-book.

(Continued in October PHILCO NEWS)

Retail Operating and Selling Methods

The New Philco Dealer Manual

In Serial Form

Part I

THE trend of the radio business is apparent to all who are connected with the industry. The fly-by-night manufacturers who rushed in at the start are largely weeded out, and the industry is now reaching a point of stabilization.

The manufacturing of radio receivers has passed into strong hands—groups that can finance, operate and manage it properly and intelligently.

The manufacturing concern that maintains leadership today must be alert and progressive, efficiently organized and controlled both in merchandise and production. Its market must be keenly analyzed and accurately gauged, and then developed by aggressive, sound merchandising and advertising policies.

And another important development is the fact that there is going to be fewer but better, far more prosperous dealers in the radio business in the future—the near future. Hit and miss methods of radio merchandising are fast being eliminated. Dealers are being more carefully selected, are being given proper territorial and franchise protection, and by adopting efficient merchandising and accounting methods, they will find themselves in a mighty profitable business with a limitless future.

Proper manufacturing control is steadily eliminating "distress" merchandise. The day is not far distant when distress merchandise of any value will be a rare article, and then the dealer who now depends upon that type of merchandise and its advertising value for his business and his profits must adopt other methods—stable and enduring methods—in order to survive. Already the radio dealer who has been concentrating on one line of radio, intensively and intelligently, selling it with a personal service and in constant personal touch with his customers, is fast forging into the lead.

The radio business is taking the same trend taken some years ago by the automobile business. This motor car business is truly analogous. You can probably remember when the automobile dealer handled four or five makes of cars. You can remember the many "over night" manufacturers. You can recall the "distress" and "orphaned" merchandise.

You can also remember when this automobile business began to be stabilized, when it gradually passed into stronger hands, when the manufacturing and the merchandising of automobiles became more and more efficient.

And today the automobile franchise is worth a lot of money, and the dealer who in the early days selected his manufacturer with care, stuck to the business, standardized his methods, merchandised efficiently and followed good advice, today owns and operates a mighty prosperous business.

The automobile business grew to tremendous size and became stabilized because it was worth stabilizing. The radio business will have limitless growth and complete stabilization because it also is worth stabilizing. And a big factor, a mighty co-operating force, is the fact that in radio as in motor cars, brands, names, prestige mean something, a fact which is not characteristic of all merchandise. Ask a man to buy an unknown car and he refuses. Ask a man today to buy an unknown radio, and he refuses.

The wide public acceptance of radio, the keen public interest, the tremendous pleasure, joy and happiness that it provides, convinces us that the future of this business from the retail standpoint—hence the manufacturing standpoint—possesses possibilities far greater than can be comprehended. There are more profitable developments possible in this business than in most any other industry ever started by man.

In other words, during these days you may put on your books one hundred, five hundred or one thousand retail customers for radio, and wake up most any day to find that you have something else, a new development, mighty desirable, to sell to those one hundred or one thousand customers of yours. You have picked the greatest of all enterprises today in which to engage.

Naturally it is your desire to become one of the selected, established radio dealers in the near future—this very year—when certain radio franchises in themselves represent real value—even more value than those of the popular motor car brands. And the mere fact that you possess this booklet proves that you can be one of those dealers, if you concentrate on one line of radio, do it justice, identify yourself inseparably with it, and work closely with the manufacturer.

Concentrate on one line—avoid overstocking—avoid obsolete, slow-

Before You Start—Read This Message

TO YOU, Mr. Philco Dealer:

We have more than a selfish wish behind a sincere desire that you read and study this manual.

We know, from a very close study of the retail radio business, that the dealers who are going to make money this season are those who concentrate on a "hot" line and specialize their selling effort. Those who do not are face to face with two great business-destroyers—competition and basic economic law. Only by modern, intelligent merchandising may these be avoided.

The retail selling methods Philco advocates are based on years of experience. This book is the keystone of our retail merchandising promotional service—a continuous, carefully planned method of helping you. As you saw in "The Most Amazing Radio Story Ever Told," the large 1931 Philco Portfolio, a wonderful campaign to assist you is provided, but, frankly, many of the co-operative helps we offer you cannot be 100 per cent effective unless your business is set up along modern retail merchandising lines.

So we ask first that you carefully study the text of this book. Probably you won't have the opportunity to do it all at once. We have divided it into parts. Promise yourself you stick to it until you're all the way through. We guarantee you will be repaid when you put the plans we suggest into effect—repaid in dollars and cents and the knowledge that your business is securely based on the most successful retail merchandising plan and the fastest selling radio line in the world.

PHILCO—Philadelphia

P. S. The actual selling dialogue is given in detail in your other manual—"Retail Salesmanship—Facts and Dialogue."

moving merchandise; adopt efficient merchandising methods; and you will be one of those particular, protected, selected dealers getting more profits, more benefits and more factory co-operation than ever.

For Authorized Registered Philco Dealers

Developments have proven that your selection was wise. Philco stands at the top of the radio industry today—that fact is everywhere admitted. When Philco entered the business of manufacturing radio receivers, it announced that Philco was determined to build nothing but quality radio—to build it as the public wanted it built—in the variety it should be built—at prices that would always represent big values—backed up by continuous, tremendous advertising—deliveries when deliveries should be made, and with none of that over-production that had been so unsettling to the industry. Philco rigidly adhered to that policy and today Philco Balanced-Unit Radio possesses a prestige and a public acceptance that are without equal.

The year of 1930 is history—big history—for Philco. In 1930 Philco

offered the public a complete line of Balanced-Unit Radio, marvelous in performance and housed in handsome furniture at a price range that astounded the industry. And you know that Philco radio sold—and sold to the ultimate consumer in amazing volume—no over-stocking, no obsolete models, no Philco price-cutting, no forcing of merchandise at any time.

For 1931!

A wonderful new, complete line of Balanced-Unit Philcos, every one a Superheterodyne. Prices which immediately speak of an amazing value! Every modern radio feature—Tone Control on every set, Station Recording Dial with Glowing Arrow for new ease in tuning. Genuine, new, oversize, full Electro-Dynamic Speaker. Automatic Volume Control on the Model 112! And every model housed in beautiful new furniture. This is the most complete and the fastest selling radio line in the world. Even more important—it is the most profitable!

Meets Public Demand

You know that today the public absolutely demands everything that quality radio should possess—perfect, clear purity of tone, split-hair selectivity, vast distance range, magnificent furniture, and genuine Electro-Dynamic Speaker; and then, if there is anything newly perfected, a truly outstanding feature, the public demands that also. And finally, in order to do the maximum volume of profitable business, such complete quality radios must be offered at attractive prices—low prices—less than the public expects to pay.

That was the secret of Philco's popularity in past years—giving the public the finest in radio performance at most attractive prices. And this year—this present season—Philco offers finer radio performance than ever with added features.

In other words, Philco makes it possible for you to concentrate on one line of radio, and meet any price division of public demand. Regardless of the customer, you have a model to fit his desire, a model to suit his pocket-book. And when you are merchandising Philco, you can feel entirely confident in the face of all competition, because you know that you will positively outstrip all competing makes.

Gigantic Advertising Program

The Philco line this year is so "hot" that it actually ought to sell in tremendous volume without national advertising, but these splendid Philco models will be backed up by the most tremendous advertising campaign in all Philco history.

Beginning at once, right today and week after week, smashing, big Philco advertisements in color will appear in the leading national magazines such as *The Saturday Evening Post* and *Collier's* and many others. You will find a list in the largest presentation book the Philco salesman gave you.

The vast American buying public throughout the entire United States, in every city, village and hamlet, will be told about these new Philco models—not once, but time after time in splendid, big, national magazine advertisements.

Furthermore, Philco is this year sponsoring a gigantic, hard-hitting local advertising policy, your newspaper, billboards in your locality, local broadcasting and many other features to bring business to your store.

(Continued in October PHILCO NEWS)

Philco Radio Service

Here are the Features You Want to Know About the 1932 Philco Radio Line

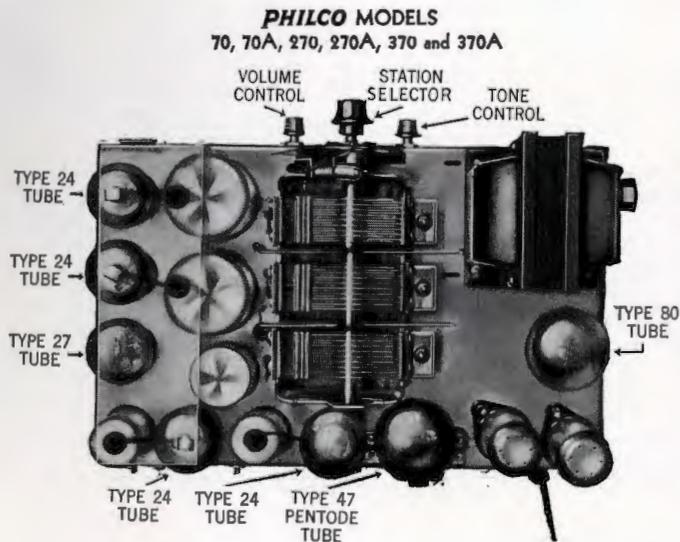
Model 70

Superheterodyne balanced-unit circuit. Six tuned circuits afford sharp selectivity at all points on the dial. Great distance range. Seven Philco balanced tubes, four screen grid. Pentode power output tube.

Tubes used in circuits as follows:

Type 24, R. F. amplifier	Type 24, second detector
Type 24, first detector	Type 47, pentode power output
Type 27, oscillator	Type 80, rectifier
Type 24, I. F. amplifier	

Philco improved electro-dynamic Speaker affords remarkable tone quality due in large part to newly perfected flexible center and edge cone suspension.



Tone Control and static modifier. Illuminated station recording dial and glowing arrow station finder make tuning extremely simple. Approved by Underwriters' Laboratories.

Available for the following power supply:

105-125 volts, 50-60 cycles, A.C.
105-125 volts, 25-30 cycles, A.C.
210-240 volts, 50-60 cycles, A.C.

Power consumption, 80 watts

Model 90

Superheterodyne balanced-unit circuit. Seven tuned circuits afford sharp selectivity over the entire dial. Great distance range.

Double tuned pre-selector circuit prevents cross talk from interfering stations and permits use of long aerial without sacrifice of selectivity.

Nine Philco balanced tubes, four screen grid; push-pull power output. Screen grid type 24 tube as R. F. amplifier; type 24, first detector; type 27, oscillator; type 24, I. F. amplifier; type 24, second detector; type 27, first audio; two type 45 tubes push-pull power output; type 80, rectifier.

Philco improved electro-dynamic Speaker with new flexible center and edge cone supports gives tone quality of great brilliance.

Four-point tone control and static modifier gives all degrees of tone reproduction—"brilliant," "bright," "mellow" and "deep." Makes possible a compensation for variations in the quality of broadcasting from different stations and for differences in the human ear.

Illuminated station recording dial and glowing arrow station finder greatly simplifies tuning the set for different stations.

Four-gang tuning condenser.

Tremendous volume and distance range available when desired. Two position range switch for easy, quiet tuning or for full-power distance tuning. Approved by Underwriters' Laboratories.

Available for following power supply:

105-125 volts, 50-60 cycles, A.C.
105-125 volts, 25-30 cycles, A.C.
210-240 volts, 50-60 cycles, A.C.

Power consumption, 95 watts

Model 112

Philco balanced-unit superheterodyne-plus. Eight tuned circuits, including double-tuned pre-selector circuit, give maximum practical sharpness of tuning.

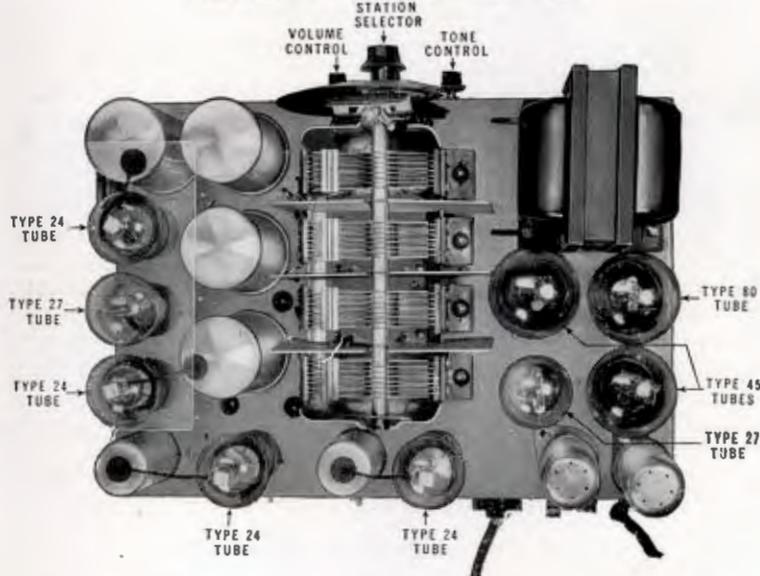
Automatic volume control counteracts fading of distant stations and blasting of locals, through special Philco automatic control circuit.

Eleven Philco balanced tubes used in circuit as follows:

Type 24, first R. F.	Type 27, detector amplifier
Type 24, first detector	Type 27, first audio
Type 27, oscillator	Type 45, second audio
Type 24, first I. F.	Type 45, push-pull
Type 24, second I. F.	Type 80, rectifier
Type 27, detector rectifier	

Oversize Philco improved electro-dynamic Speaker with new flexible center and edge cone supports gives utmost in tone quality and Speaker efficiency.

PHILCO MODELS 90 AND 90A



Four-point tone control and static modifier gives all degrees of tone reproduction—"brilliant," "bright," "mellow" and "deep." Makes possible a compensation for variations in the quality of broadcasting from different stations and for differences in the human ear.

Large drum-type illuminated station-recording dial with glowing arrow station finder permits extreme accuracy and ease of tuning.

Four-gang tuning condenser.

Tremendous volume and distance range when desired. Range switch for quiet, easy, average reception, or for greatest available power for tuning stations thousands of miles away.

Approved by Underwriters' Laboratories.

Available for operation on the following power supply:

105-125 volts, 50-60 cycles, A.C.
105-125 volts, 25-30 cycles, A.C.
210-240 volts, 50-60 cycles, A.C.

Power consumption, 105 watts

For correct operation and best tone quality, always loosen the shipping bolts which hold the Philco chassis in the cabinet. It is important that the chassis be floating in rubber at all times and that it does not come in direct contact with the cabinet, either at the front or the sides.

Philco Radio Service Page

Delivery Hints Which Increase Good-Will

Carrying into the customer's home the fine impressions which he has received in the store is a highly important factor in the successful completion of a radio sale, and one which is largely up to the service man.

When the average customer first receives a new radio set in his home he often needs reassurance of the wisdom of his purchase. Proper eye appeal and proper performance will afford this reassurance better than anything else.

We are offering a few suggestions which past experience of many dealers has shown to be of utmost value in clinching the business friendship of the customer and in keeping the instrument sold:

1. *Test Radio and Tubes Before Delivery*—Always make a thorough operating test of the instrument and its tubes before delivery. It is far more desirable that you discover and take care of any small imperfections in the set at your store or in the service shop, rather than in the customer's home.

2. *Polish the Cabinet*—The cabinet should be wiped with a soft cloth and polished with a good grade of furniture polish to ensure the best possible appearance upon delivery. Your distributor can supply you with the correct polish for this purpose.

3. *Secure All Moving Parts*—Any loose or moving parts in the instrument should be securely fastened. This is particularly true of the radio-phonograph combinations. Incorrect performance can result if the tone arm is allowed to swing violently during transit or if the turntable is not removed.

4. *Deliver in Padded Cover*—If delivery is being made locally by truck, the cabinets should be protected by a padded canvas cover. This will prevent the cabinet from becoming scratched and will enable you to place it in position in the shortest possible time.

5. *Install Carefully and Quickly*—If a good aerial and ground connection are available the installation should take but only a few minutes. Do not assume, however, that an aerial which has been used on a previous set is still a good aerial. Always make a complete inspection for unsoldered or badly corroded joints. These are a source of noise and lack of sensitivity which will be blamed on the set if they are not properly corrected at the time of installation. If the aerial and ground installation are faulty, make the necessary arrangements with the customer to have the condition corrected.

6. *Instruct Customer in Operation*—Correct operation is highly important in the modern radio receiver. Be sure that at least one member of the customer's family is given complete instructions on the proper method of operating the receiver. Many set owners—in fact many radio salesmen—do not realize the necessity for correct tuning of a station in order to avoid distortion. Demonstrate to the customer how the full purity of tone is obtained when the station selector is tuned exactly to the station, and how distortion occurs when the station selector is tuned slightly above or below this point on the dial. Remember that your ultimate profits will be greater if the customer has complete confidence in his set and in you, as a dealer, than they will be if you save a few cents by slighting the installation.

Condenser Data

The following Color Code will be used to determine the capacity of the small fixed condensers used in all models of Philco Receivers.

PART No.	CAPACITY MF.	COLOR
3082	.00025	Yellow
3774	.00005	White
3910	.0005	Green
4059	.002	Light Blue
4519	.00011	Blue and Golden Yellow
4520	.0007	White and Golden Yellow
4587*	.00005	Light Blue and White
5120	.00041	Yellow and Orange

*NOTE: Part No. 4587 is held to closer tolerance limits than Part No. 3774. Do not substitute either of these Condensers. Use the part listed in the Service Manual.

Resistor Data

Starting with the Model 46 and continuing in all future models, standard R. M. A. colors are being used to indicate the value of the various resistors in Philco Receivers. The code is as follows:

- | | | | | |
|---------|----------|----------|----------|---------|
| 0—Black | 2—Red | 4—Yellow | 6—Blue | 8—Gray |
| 1—Brown | 3—Orange | 5—Green | 7—Violet | 9—White |

The body color represents the first digit in the resistance. The tip color represents the second digit. The dot color represents the number of zeros after the second digit. If the dot color is not present consider it to have the same color as the body. For instance, Resistor No. 3524 in the table below has a brown body—this means that the first digit is one, it has a black tip meaning that the second digit is zero, it has an orange dot meaning that there are three ciphers after the second digit or a resistance value of 10,000 Ohms.

Philco Resistors are made in two sizes—one to carry .5 watt and a larger resistor to carry 1 watt. Below is a table giving the part number and color code used in present Philco Resistors.

PART NO.	POWER (Watts)	RESISTANCE (Ohms)	COLOR		
			BODY	TIP	DOT
3524	1	10,000	Brown	Black	Orange
3525	1	32,000	Orange	Red	Orange
3526	1	5,000	Green	Black	Red
3542	1	70,000	Violet	Black	Orange
3655	1.6	1,000	Brown	Black	Red
3656	1	25,000	Red	Green	Orange
3766	1	13,000	Brown	Orange	Orange
3767	1	99,000	White	White	Orange
3768	1	240,000	Red	Yellow	Yellow
3769	1	490,000	Yellow	White	Yellow
4237	1	51,000	Green	Brown	Orange
4409	.5	1,000,000	Brown	Black	Green
4410	.5	240,000	Red	Yellow	Yellow
4411	.5	99,000	White	White	Orange
4412	.5	10,000	Brown	Black	Orange
4414	1	1,000,000	Brown	Black	Green
4515	1	2,000	Red	Black	Red
4516	.5	25,000	Red	Green	Orange
4517	.5	490,000	Yellow	White	Yellow
4518	.5	51,000	Green	Brown	Orange
4590	1	1,000	Brown	Black	Red
5023	1	190,000	Brown	White	Yellow

Care in Fastening Moving Parts of Radio-Phonograph

Great care must be exercised when delivering or reshipping radio-phonograph instruments to see that all moving parts are securely fastened. This is particularly true of the automatic record changer models which can come out of adjustment if the tone arm is allowed to swing during transit. The following packing suggestions will be of help to you in reducing unnecessary service on these instruments:

1. On all radio-phonograph instruments always remove the needle from the electric pick-up, and tighten the needle screw securely before delivery.
2. Tie the pick-up arm securely to a fixed point on the motor board in such a way that the arm will not move either horizontally or vertically.
3. Remove the turntable and wrap it separately.
4. On the automatic record changer instruments, place the record magazine in its downward position, and tie it and the record weight securely to the magazine stand.

Changes in Service Bulletins

Several changes have been made in Philco Service Bulletins recently issued. The following changes should be made on all your copies:

Service Bulletin No. 55—Change second line of second paragraph from 111 and 111-A to 112 and 112-A.

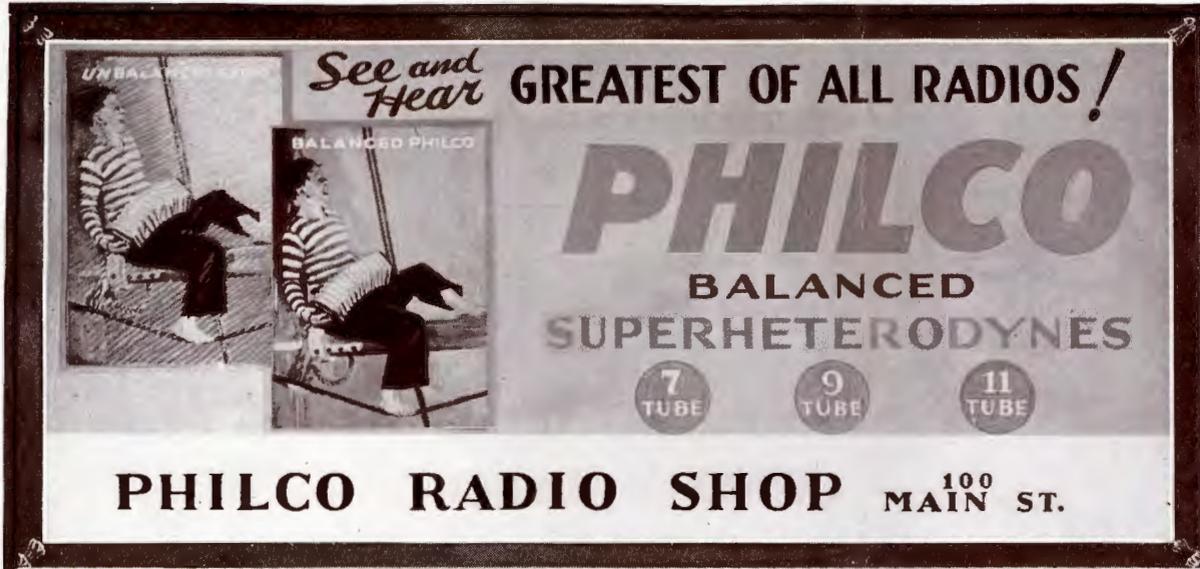
Service Bulletin No. 56—Bias resistor 38 should be placed in center tap lead instead of filament lead. This resistor is marked on the diagram with terminals 1 and 2 and should be inserted in the wire shown connected to No 7 instead of the one connected to No. 8.

Service Bulletin No. 57—Table 3 Condenser Data, item 41, interchange 6 and 10 mfd.

September, 1931

New 24-Sheet Poster

Free to You Every Month



PHILCO furnishes you these colorful posters absolutely free. Philco dealers have made great successes with 24-sheet posters. They come with your name and address imprinted in large letters across the bottom.

Arrange with your Philco distributor or your local advertising agency for a showing of these dominating posters.

All Philco posters will feature Philco Radio and the Philco dealer only.

The New Haynes' Philco Radio Logs Are Ready

THEY are specially prepared for Philco dealers who time and again have said they were the finest and most complete radio logs published. Philco distributors and dealers have used them during the past three seasons with telling effect.

The perfect arrangement of Haynes' Radio Log virtually tests any radio, creates a desire for selective and sensitive radio sets, and sells new tubes and service.

They are ideal for "door openers" in canvassing.

One, properly marked and posted on your window, will attract attention to your store and demonstrate the superiority of the PHILCO Radio.

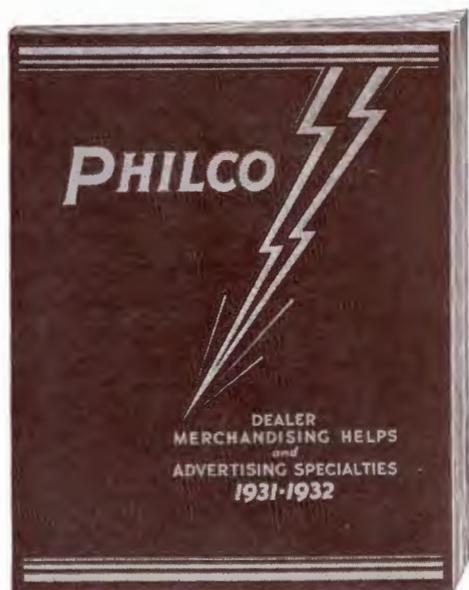
Thousands of the highest radio authorities endorse Haynes' Radio Logs as the best. You may order them at any time with assurance that they will be up-to-the-minute and exploit the latest Philco models.

Booklet form . . . 1000 at 2½c.	500 at 2¾c.	250 at 3c.	100 at 3¾c.
Chart form . . . 1000 at 1¼c.	500 at 1½c.		200 at 2c.

By express F. O. B. Chicago | Postage Prepaid

Imprinted with your name and address, \$2.50 additional, regardless of quantity.

Send order and check direct to Haynes' Radio Log, 608 S. Dearborn St., Chicago, Ill.



The Brilliant Catalog of Sales Helps

Don't Forget Your Novelty Catalog

WIDE-AWAKE Philco dealers are using their novelty catalog of modern advertising novelties every day. Every item listed has been carefully selected because of its value in attracting customers to your store. Every item is an extraordinary value and priced cheap enough to give away. To make them more effective than ever, each and every one, where space permits, carries the true and distorted pictures that play such a big part in Philco's great national advertising campaign.

Make your selection now and get these sales aids out working to increase your sales of Philcos.

Send orders and inquiries for material to:

The Brilliant Manufacturing Co.
1035 Ridge Ave., Philadelphia, Pa.

You see only the small, lighted single dial and lock on instrument board or steering column.* Radio and speaker are built in, out of the way, hidden yet accessible. Aerial is also concealed. Your automobile battery supplies the slight amount of "A" current required, "B" batteries nest in metal case mounted under floor.—Philco-Transitone Radio including 7 Philco Balanced Tubes and Philco "B" batteries . . . \$99.80

COMPLETELY INSTALLED

*For control on steering column (as shown below in illustration) instead of on instrument board, \$5 extra

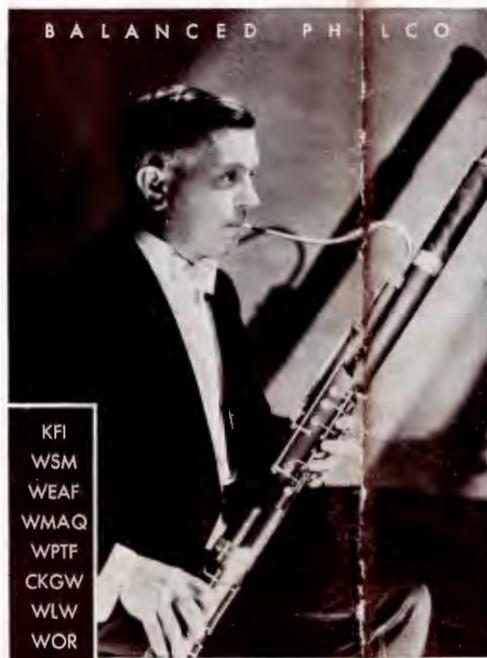
Prices slightly higher in Canada, Denver and West



Entertain anywhere! IN YOUR CAR AS IN YOUR HOME, THERE'S NO RADIO LIKE PHILCO



NOW YOU CAN ENJOY PHILCO RADIO PERFORMANCE WHEREVER YOU RIDE OR STOP



Just as the picture above represents the distorted tone, the blurred reception of an unbalanced radio — so the distorted "station strip" shows the gaps, the overlapping of stations found on an ordinary set

WSM
WEAF
WMAQ
WPTF
WWR
WGN
WSB
WJR
WJZ
WBBM

KFI
WSM
WEAF
WMAQ
WPTF
CKGW
WLW
WOR
WGN
CKAC
WSB
WJR
WJZ
WBBM

Here you see the undistorted tone plus selectivity secured with the Philco-Transitone Automobile Radio built with balanced units. Each station is distinct and separate — each program clear and vivid

Now you never need to miss those radio features you like to hear. At the same time you enjoy your car (or motorboat), enjoy your favorite radio programs! A built-in Philco-Transitone performs as gorgeously clear and true as a Philco home radio.

There is delightful variety in the many broadcasts it tunes in without cross-talk. After selecting a station, you need not touch the dial! Turn, twist, vary speed through city or country; volume is held constant, fading is checked, by Philco's famously successful Automatic Volume Control.

Such amazing and thrilling performance is yours at startling low cost because Philco is the world's largest radio manufacturer. Here is triple screen grid, full seven-tube power plus! Philco engineering has utilized it with Philco Balanced Units, an electrodynamic speaker and true Philco quality, to perfect a radio of matchless ability.

Thoroughly enjoy the programs you've missed to take rides, keep engagements, do errands, go on picnics. Entertain yourself during tedious waits. Keep mentally alert when tired or traveling monotonous routes. On vacations, tours, week-end trips, have the companionship, diversion and latest news of radio. A Philco-Transitone will be expertly installed by an Authorized Service Station, the day you want it.

Experience the pleasure of real Philco Radio as you ride! Near you a dealer is giving demonstrations. Philco-Transitone, Ontario and C Streets, Philadelphia, Pa.

Chrysler De Soto Dodge Plymouth Pierce-Arrow Studebaker Philco-Transitone is now optional standard-equipment at the factory on the above automobiles; it is the only Automobile Radio their engineers approve and recommend. In addition, Franklin, Lincoln, Nash, Reo, Stutz and other makes are factory equipped with aerials. \$10 extra charge if automobile, open or closed model, has no aerial. Aerials are easily installed in any make of car, also buses and motorboats. Philco-Transitone is manufactured and sold under patents of Transitone Automobile Radio Corporation.

PHILCO

Transitone

AUTOMOBILE RADIO

© 1931, Philco

PHILCO

Published every Month by PHILCO, a progressive group of Radio Manufacturers in

VOL. II

OCTOBER 1931

Ain't it a grand and glorious feelin'—to be a PHILCO DEALER?

WITH many basic industries running half-speed or less; with world-leading companies pulling up their belts; with numberless commodities at their all-time lows; with a specially beautiful licking predicted by business prophets for the radio industry—on this grim stage, Philco's remarkable record for 1931 stands out in the spotlight like a modern business miracle!

Magazines publish articles about us!

Chambers of Commerce and trade bodies discuss us!

Business doctors analyze us for the secret of success!

Eminent national leaders comment on our performance!

Yes, it's a grand and glorious feeling to be a Philco dealer—and part of an organization forging straight through the depression, with more than double the sales of any previous year—out-selling all other radios combined—*increasing* instead of diminishing your profit opportunities.

But smug satisfaction is not part of that feeling. That isn't the spirit that started the job—it isn't the spirit to finish it right. In other words, we're not kidding ourselves.

Now at the top of the active selling season, every Philco man knows, more keenly than ever, that we can't overlook any bets these days if we want to make satisfactory profits for all.

Every man knows that beating last year doesn't count. He knows the job is bigger than "beating competition." He knows the real job means *full development of every profit opportunity*. We have the merchandise. Even competition admits that. From top to bottom of the line, in every price class, Philco gives biggest *value* by sensational margins.

We have the advertising—national and local—it dominates the industry.

We have the prestige and power of the greatest musical programs ever put on the air—Leopold Stokowski and the Philadelphia Orchestra in seven full-length broadcasts, on the mightiest network ever assembled for a musical broadcast.

Let's bear down and make the pay-off something to be remembered! Do these five things, and you'll do the job right:

1. *Sell up*—get the extra profits of higher bracket sets.

2. *Sell Philco-Transitone*—you have a virgin market of millions, with a monopoly on *genuine performance*.

3. *Sell tubes*—they swell your profits more than you may think!

4. *Sell batteries*—you have the best that are made.

5. *Sell the new Philco Radio Clock*—the greatest profit accessory that the industry ever saw!

Well done, that program means the greatest year for distributors, dealers and salesmen in all radio history.



The Philco Combination Radio-Phonograph as shown in Delineator Interiors

Year Event All Broad-

Doubling the Number— Doubling the Length—

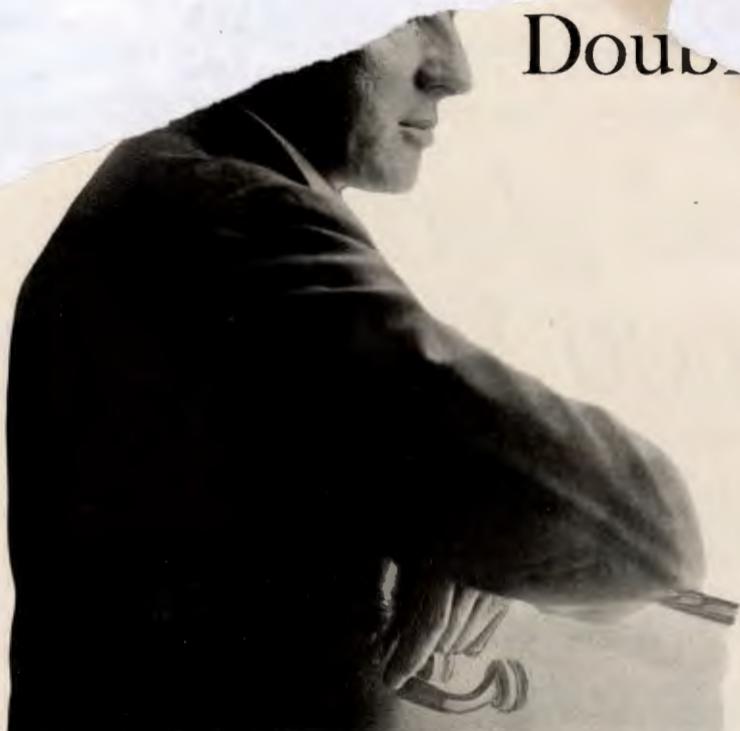
of Famous

Stokowski - Philadelphia Orchestra Symphony Concert Broadcasts

Over Entire Network of Columbia Broadcasting
System—the Most Stupendous Hook-up Ever
Devoted to a Musical Program

with

Every Radio in America Tuned In!



Leopold Stokowski

BY popular acclaim, the Philco Leopold Stokowski-Philadelphia Orchestra broadcasts have become the greatest musical broadcasts of America, ones that everyone "attends." They have taken their place as the super-classic of the air as definitely as the Philadelphia Orchestra is acknowledged the world's foremost musical organization.

What the Metropolitan is to opera, the Kentucky Derby to thoroughbreds, Notre Dame to football, these spectacular concerts are to the fans of the radio world.

The enormous success of the Stokowski programs, for two years past, both from an artistic and a merchandising standpoint, is responsible for Philco's decision to present them this year on a tremendously magnified scale.

Instead of four concerts—this year there will be SEVEN!

Instead of one-hour broadcasts—this year each program will present a full-length concert of one hour and three quarters!

Instead of a studio performance, each program will be broadcast direct from the stage of the historic Academy of Music at Philadelphia, from a regular performance of the concert season.

Each will be broadcast over the entire network of the Columbia Broadcasting System, the mightiest network ever assembled for a symphonic broadcast.

Each will be broadcast, by special methods created by Stokowski himself, to give the fullest possible concert values and grandeur for radio reception.

And you can bank on this—from an advertising and merchandising standpoint: Just as surely as Philco's enormous national newspaper and outdoor advertising gives Philco out-

standing dominance in visual advertising, these seven concerts from October 12th to April 2d will absolutely dominate the air.

Not only their impressive length, their number, their costliness, their spectacular splendor, but their overwhelming prestige, reflects the highest association of merit on the Philco organization, the Philco dealer and the Philco product.

It is one thing to present the public with programs of fleeting interest and vaudeville caliber. It is altogether another to present a series of epic grandeur, in the glamour of world masters and with the authority of the famous Philadelphia Orchestra. These concerts identify Philco with an event memorable in the lives of every music lover—and they identify it in its proper position as the leader of the radio industry. By its very magnificence and momentum this



The Philco-Stokowski Ad Which Appears in The Saturday Evening Post October 10



casting Hisio

series of concerts cannot but exert a tremendous effect in stimulating Philco sales.

But your individual profit will be in proportion to the energy and effort you apply in exploiting these spectacles to the utmost. Every Philco dealer should begin at once to plan his campaigns to take advantage of the Stokowski concerts.

Review at once the program with which you tied up last year and the year before to these broadcasts. You will find many of these operations perfectly usable for this year's campaign, with the advantage of having experience in their performance.

Here are some suggestions that you may be able to adapt to your own local situation—every one of them a proven, business-getting operation that should prove more productive now than ever before:

Contact all musical organizations and societies, including those of foreign language, and interest them in hearing these concerts, as an organization, *in their own auditoriums*.

Lend them one or more 11-Tube Philcos for the reception of the Stokowski programs—a wonderful opportunity to demonstrate the performance of this great set before large audiences of music lovers, under ideal conditions. Distribute Stokowski concert programs and Philco literature at these auditions, wherever possible, as it should be possible in nearly all cases.

Make similar arrangements with local music schools, high schools and academies, stressing the high educational and cultural value of the concerts.

Send out to your preferred list of prospects announcements of the opening concert, calling their attention to the vastly improved reception of radios being built today, and particularly of Philco, featuring the selectivity, power and Automatic Volume Control of the 9- and 11-tube sets.

Put the beautiful Philadelphia Orchestra display in your window. Put up the Stokowski window displays.

Throw open your doors for a reception during the

; distribute handb...
departments of your neigh

Use the telephone to make personal calls on the concertgoers, with a suggestion of how much tonal qualities will be available for these concerts as other programs, with a Philco Balanced Superheterodyne.

Instruct your salesmen to make these concerts a part of their sales talks. Outside salesmen will find it an excellent opening if they begin their calls with a comment on the series; tell something of the magnitude and importance of the concerts, and then suggest the wonderful advantages of receiving them with a Philco.

The Philco-Stokowski Radio Concerts will be heavily advertised. Every Philco national advertisement during the concerts will carry mention of them. *The Saturday Evening Post*, *Collier's* and leading musical publications will carry the announcements.

A wealth of merchandising material will be available for dealers in conjunction with the series.

Tremendous publicity in the news columns of the daily papers has already started. Special newspaper articles will tie up your local store as a sponsor of the concerts.

Special newspaper advertising will be available and every possible means will be utilized to help you cash in on this series.

Your local advertising agencies will co-operate closely in newspaper advertising and publicity covering this series, as well as in suggestions for mailings, store receptions, window

trims, etc., for developing the maximum dealer tie-up to the national appreciation and advertising the series will give Philco.

This series of concerts represents the greatest concentration of salesmanship for Philco prestige and quality that was ever put on the air in radio history. Because of its tremendous size and scope do not expect it to do all the work.

You will profit precisely by the amount of energy and initiative with which you exploit the opportunity it creates.

Put Stokowski to work for you, and watch the biggest sales in all radio history reward your efforts.



The magnificent American Academy of Music, Philadelphia, where music lovers hear Stokowski and his famous Philadelphia Orchestra—and where Stokowski will broadcast his Philco Concerts

s Here! Philco Radios

national
Stocks A

al Advertising is Reaching Millions of Them

Example for the Selling-Up Season

Business news of the year for the entire Philco organization is the opening up wide of the hot selling season on the new 9-Tube Philcos featuring Automatic Volume Control, and the 11-Tube Superheterodyne-Plus.

Big sales in these sets spell SUPER-PROFITS-PLUS—and everyone knows it. Extra profits for distributors—extra profits for dealers—and extra commissions and bonuses for retail salesmen.

From the 5-Tube Baby Grand, T. R. F., right up the line, we were never so equipped to do a real *selling-up* job.

Tube for tube, and circuit for circuit—in every price class, Philco gives more power and selectivity—more performance and beauty—truer tone—greater value—and at prices that are startling.

With a \$36.50 base price, you have an immensely wider market from which to sell up. And every step of your up-selling way you offer added value and satisfaction to more than give customers their money's worth.

Already the outstanding "Best Seller" in its field, the tremendous advantage which Automatic Volume Control now gives the 9-Tube Philcos needs no telling.

And here—back of the 9- and 11-tube sets—is a concentration of advertising, national and local, such as was never before in radio history placed in support of such quality and prices!

Big releases of 4-color advertisements and double-page spreads, predominantly featuring Automatic Volume Control, are now appearing in national magazines with millions and millions of circulation.

In addition to the national advertising, a powerful campaign of newspaper advertising is right behind your local efforts on these higher profit sets.

And capping it all you have the tremendous prestige and publicity of the Stokowski-Philadelphia Orchestra broadcasts now working for you.

Here is a whirlwind barrage of advertising weight and power—the greatest ever released—overwhelming competition beating down resistance and creating thousands and thousands of new prospects for you to sell up.

We urge you now to get ready—check your stocks of 9- and 11-Tube Philcos—and be sure you have enough to meet your demand. Retail salesmen, too, are vitally interested in seeing that there are enough of these sets in stock, so they won't lose sales for lack of sets to deliver.

Your customers are ready for the higher-priced, high-profit

merchandise. Everyone is back from vacation. The season of big radio programs—football, prize fights, great musical programs—is at hand.

Dealers, right now, should be tuning themselves and their sales organizations to make the most of these PROFIT-OFFERING days by intensively selling up to the high-profit sets.

You'll find big-set profits are just as easy to get and enormously greater in the total if you go after every prospect, from the Baby Grand up, with an idea of selling greater radio satisfaction in a larger Philco set.

To Help You Sell Philco Automatic Volume Control

"Selling up" means selling your customer on the increased advantages offered in the more expensive radio models.

One of the most important of these points of advantage is Philco automatic volume control. Most of us know what it will do, but few know what it is and how it operates in the radio circuit. A better working knowledge of this important advance in modern radio will be of the greatest help to you in your "selling up" campaign.

Philco automatic volume control can be likened in its action to a governor—the automatic speed control—of a steam engine. If the steam supply increases slightly, the governor closes the valve a small amount, causing the engine speed to return to normal. Again when the steam pressure lowers, the governor increases the valve opening, allowing more steam to flow in and thus maintain constant speed. These regulation changes occur so fast, the effect is that of steady, uninterrupted speed.

Thus it is with the Philco automatic volume control. When the broadcast signal increases in strength, as would be the case when tuning from a weak station to a strong local, the automatic volume control acts immediately to decrease the amplifying power of the receiver so as to compensate for this increased signal strength. When the signal fades, the automatic volume control increases the sensitivity of the set so as to bring in the signal with its original volume. Automatic volume control overcomes two of radio's biggest disadvantages—fading and the loud blasting-in of local stations.

Automatic volume control is the speed control of a radio receiver, but unlike the steam engine governor, it is not an additional part which might be added—it is an inherent part of the radio circuit in which it is used.

The automatic volume control functions as a control of the amplification power of the radio frequency amplifier tubes. The grids of these we can picture as control valves for the tubes. A small amount of power applied in the control of the valve (grid voltage) results in the control of a relatively large amount of power in the output of the tube (plate current).

The detector rectifier tube receives a greatly strengthened radio signal after it has been built up and amplified in the R. F. and I. F. amplifier tubes. The output of this detector rectifier is connected to a resistor which furnishes C bias (grid voltage) for the R. F. and I. F. tubes. As the output of the detector rectifier increases, the grid or control voltage (negative grid bias) increases, causing the amplification power of the R. F. and I. F. tubes to be reduced, thus giving a balance, so far as output volume is concerned, which is equal at all times. The same condition applies when the signal fades, the grid or control voltage decreases, causing the set to become a more powerful amplifier.

The setting of the manually operated volume control determines the volume level in the speaker, while the automatic volume control serves to maintain this volume constant through changes in signal strength caused by fading or by tuning from a weak station to a powerful local.

Philco Magazine Schedule for October

<i>The Saturday Evening Post</i> . . .	two pages . . .	October 3d
<i>Collier's</i>	one page . . .	October 10th
<i>The Saturday Evening Post</i> . . .	one page . . .	October 10th
<i>Collier's</i>	two pages, 2 colors	October 17th
<i>The Saturday Evening Post</i> . . .	one page . . .	October 17th
<i>Collier's</i>	back cover, 4 colors	October 24th
<i>The Saturday Evening Post</i> . . .	one page . . .	October 24th
<i>The Saturday Evening Post</i> . . .	one page . . .	October 31st
		—Transitone
<i>Time</i>	one page . . .	October 5th
<i>Time</i>	one page . . .	October 19th
<i>College Humor</i>	November issue, out in October	

Be sure to read every word of the two-page advertisement reproduced on pages 6 and 7. This ad will appear in *Collier's* October 17 and in *The Saturday Evening Post* October 3.

Do *l*ize that PHILCO

IMPORTANT
 BE SURE TO ASK YOUR DEALER THE
 NUMBER OF TUBES AND THE KIND OF
 CIRCUIT BEFORE YOU BUY ANY RADIO



- | | |
|------|------|
| WSM | KFI |
| WEAF | WSM |
| WMAQ | WEAF |
| WPTF | WMAQ |
| | WPTF |
| | CKGW |
| | WLW |
| | WOR |
| | WGN |
| | CKAC |
| WSB | WSB |
| WTR | WJR |
| WJZ | WJZ |
| WBBM | WBBM |

Just as the picture at the left represents the *distorted* tone and blurred reception of unbalanced radio, the "station strip" shows the cross-talk and overlapping of stations, found in ordinary sets. Above, you see the *undistorted* plus distance and selectivity of every Philco radio, clear, vivid, —each station, separate and distinct, without overlapping or cross-talk.

• PHILCO •

WORLD'S LARGEST RADIO MANUFACTURER

THE MOST SPECTACULAR BROADCAST OF ALL TIME, OCTOBER 12th, 8:15 to 10 P. M. E. S. T.

Not from the chill of a studio background, but direct from the stage of the Academy of Music, swept with storms of applause from a glittering concert audience, Leopold Stokowski and his Philadelphia Orchestra, under Philco sponsorship, will present a series of seven two-hour broadcasts over the entire network of the Columbia

Broadcasting System. From the early masters down through the centuries to our sophisticated moderns they will give you the whole glamorous sweep of the music of the ages. And you will be a part of it — just as if you were present in person. Tune in with your family and friends.

0 AUTOMATIC VOLUME CONTROL

at least double the number of programs you can enjoy?

NOW PHILCO INCLUDES IT IN SETS PRICED AS LOW AS \$69.50 COMPLETE WITH NINE TUBES

WITH Philco Automatic Volume Control you can enjoy almost any radio program you want, regardless of whether it is on a nearby or distant station.

Not primarily for the *distance fan*, the real purpose of Automatic Volume Control is to multiply the number of programs which the *average* radio user can enjoy.

If you live in the city with numerous nearby locals, still the particular program or type of music you want may be on an out-of-town station. With Automatic Volume Control, you simply tune it in and enjoy it just as clearly, with the same constant volume as a nearby program.

If you live in the country with no nearby broadcasting, your choice of enjoyable radio programs may be multiplied five to ten times by Automatic Volume Control. When you reach out, as you must, for the programs you want, Philco Automatic Volume Control holds their volume constant, in practically unfading performance.

If you like to try for distance, then Automatic Volume Control is a necessity, if only for the

purpose of preventing fading at the time the call letters are announced.

When, as in the past, Automatic Volume Control cost around \$200 there may have been good reason for many to do without it.

But now that it costs so little can anyone really be satisfied without it?

No matter where you live—no matter what program you want to hear—Automatic Volume Control, in nine cases out of ten, counteracts fading so that you not only *get*, but *hold* and *enjoy* that particular program.

Automatic Volume Control also prevents the nerve shock of "blasting" from strong locals while tuning. And it is easier to operate—no constant jumping up to adjust the manual volume control. You will be amazed to find that you can tune in dozens of local and distant stations without even touching the manual volume control knob.

Remember, Philco's Automatic Volume Control is exclusive to Philco. There is no other like it. It gives full scope and brilliancy to the selectivity of Superheterodyne—to the power of Screen Grid—

to Philco Tone-Control—to the glorious tone and realism of Balanced-Unit construction.

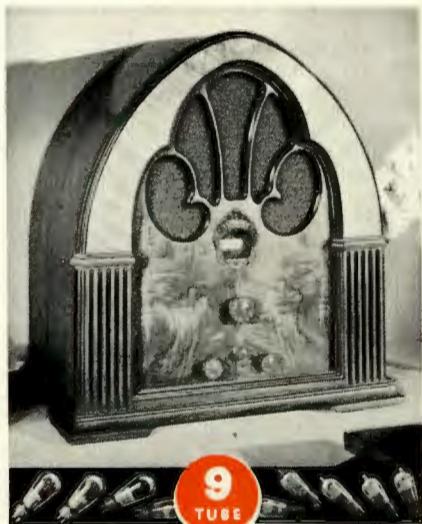
Ask your dealer to demonstrate these Philco 9- and 11-Tube Balanced Superheterodynes, with Automatic Volume Control. Because Philco is the world's largest radio manufacturer, the prices are as low, or lower, than radios of fewer tubes, and without Automatic Volume Control. Automatic Volume Control is also included in Philco-Transitone which gives you performance in your motor car like Philco in the home. Price \$99.80, installed—\$10 extra if car has no aerial. Philco, Philadelphia, Pa. Philco Products, Ltd., Toronto, Canada.

Prices slightly higher in Canada, Denver and West

MODELS WITHOUT AUTOMATIC VOLUME CONTROL

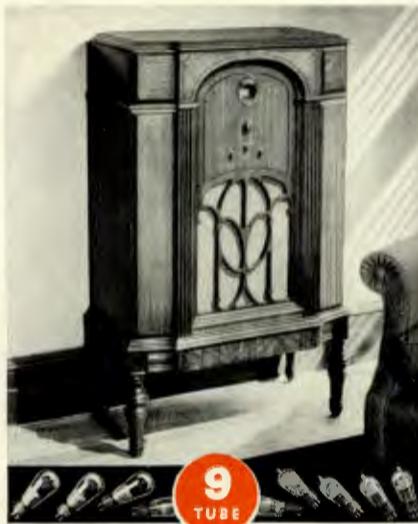
FIVE-TUBE T.R.F. BABY GRAND	\$36.50
FIVE-TUBE T.R.F. LOWBOY	49.95
SEVEN-TUBE SUPERHETERODYNE BABY GRAND	49.95
SEVEN-TUBE SUPERHETERODYNE HIGHBOY	65.75
SEVEN-TUBE SUPERHETERODYNE RADIO PHONOGRAPH	110.00

All complete with Philco Balanced Tubes, including new Pentode Power Tube—genuine Electro-Dynamic Speaker and genuine Mahogany or Walnut Cabinets.



9-TUBE BABY GRAND, \$69.50

Complete with tubes. Indisputably greatest of all small radios, with real big-set performance—Automatic Volume Control—4-Point Tone-Control—New Electro-Dynamic Speaker—Illuminated Station Recording Dial—Long Distance Switch—New Pentode Power Tube. In American Black Walnut. Instrument Panel, matched Butt Walnut and Arch of "V"-matched Oriental wood. Hand-rubbed finish. Cabinet only 18 in. high.



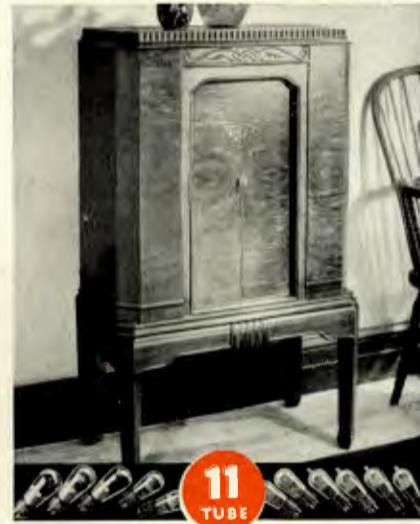
9-TUBE LOWBOY, \$89.75

Complete with tubes. Gracefully executed in American Black Walnut and "V"-matched Oriental wood, hand-rubbed finish. Decorations in pin stripe American Walnut and quilted Maple. Automatic Volume Control—4-Point Tone-Control—Oversize Electro-Dynamic Speaker—Illuminated Station Recording Dial—New Pentode Power Tube—Long Distance Switch. Also in a HIGHBOY, at \$109.75, complete with 9 tubes.



11-TUBE LOWBOY, \$149.50

Complete with tubes. Designed by Norman Bel-Geddes, premier designer, and executed in American Black Walnut and matched Butt Walnut, hand-rubbed finish. Instrument panel in figured Black Walnut. Automatic Volume Control—4-Point Tone-Control—Oversize Electro-Dynamic Speaker—Illuminated Station Recording Dial, with Glowing Arrow Indicator—Two Power Tubes—Push-Pull—Long Distance Switch.



11-TUBE HIGHBOY, \$169.50

Complete with tubes. This cabinet is by Norman Bel-Geddes, in pin stripe American Walnut and matched Butt Walnut. Sliding doors. Hand-rubbed. Automatic Volume Control—4-Point Tone-Control—Oversize Electro-Dynamic Speaker—Illuminated Station Recording Dial—Two Power Tubes—Push-Pull—Long Distance Switch. Also All-*Electric* RADIO PHONOGRAPH with automatic record changer, at \$295, complete with 11 tubes.

© 1931, Philco

Philco Balanced Tubes Better the Performance of Any Radio

IT TAKES A BALANCED SUPERHETERODYNE TO FULLY MEET PRESENT-DAY CROWDED BROADCASTING CONDITIONS

The Story of Philco!

Where the Fastest in the World is Made

A PHILCO dealer recently remarked, after completing a trip through the mammoth Philco factories in Philadelphia, that his visit was the greatest Philco inspiration he had ever known. He had seen wonders which he had never before thought possible; his tour had sold him on Philco as nothing else could possibly do.

We wish that every Philco dealer could make such a visit, for we know that he, likewise, would experience the same enthusiasm.

The factory is large—so extensive that one can easily spend an entire day walking from one building to another, from one department to another, and still not see everything. There are over six thousand Philco employees producing the world's biggest selling radio.

Starting at the beginning of production our first halt is in the Philco Parts factory at Allegheny Avenue and C Street, and only this plant will be covered in this issue. In subsequent issues of PHILCO NEWS we will visit the Philco Cabinet factory, and finally the main Assembly plant.

The building at Allegheny Avenue and C Street is devoted to the manufacture of such component parts as chassis sub-bases, small metal parts, certain speaker parts and fixed condensers.

Giant punch presses, like those shown in Figure 2, turn out the chassis sub-bases, the variable condenser housings and the speaker frames. Starting at one end of the room with heavy flat sheet steel, the different parts progress along a line of presses, each contributing its share in the forming operations, until finally the completed parts come out at the end of the line. A high-power electric welding machine that throws sparks twenty feet welds the corners of the chassis to insure both mechanical strength and

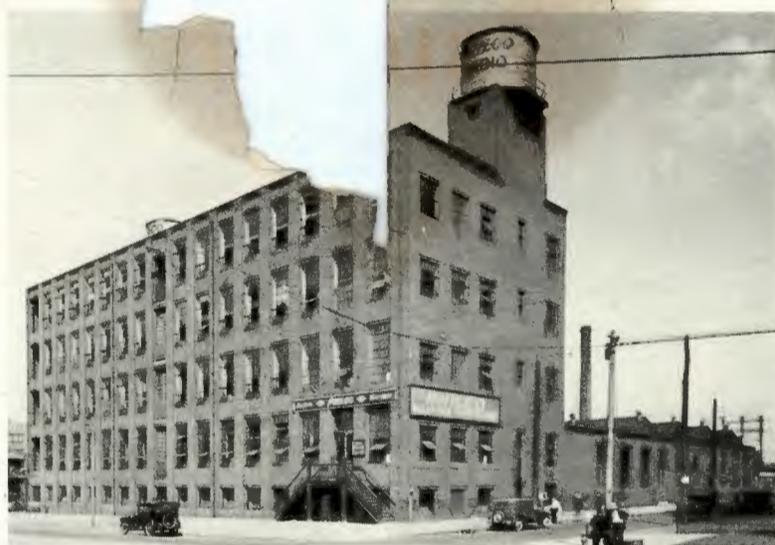


Fig. 1. Plant 6, Allegheny Avenue and C Street. This Building is devoted exclusively to the manufacture of component parts

electrical efficiency. All of the metal parts are cadmium plated to make them rust-proof. The illustration in Figure 3 shows workers hanging parts on the conveyor at one end of the cadmium plating machine.

The parts to be plated are hung on the conveyor at one end, and after passing through a series of washing baths and plating baths for a period of fifteen minutes, the plated parts are removed from the opposite end of the

machine ready for use. High-speed automatic machines, shown in Figure 4, far more productive and reliable than the best machinists, turn out completely formed speaker pole pieces from long steel bars which are loaded into the machines at the time of starting. Long brass rods placed in these machines come out as completed shafts for tuning condensers. Every one of these parts is accurately inspected with the aid of micrometer gauges, capable of finding discrepancies in diameter less than a thousandth of an inch.



Fig. 2. Giant Double Crank Punch Presses, exerting 350 tons pressure, forming a sub-base for Philco Radio Chassis

The manufacture of Philco condensers affords one of the most interesting phases of the factory tour. Condenser winding machines, shown in Figure 5, operate in a room which is kept at constant humidity all the year round. Here alternate strips of specially treated wax paper and tinfoil are rolled together to form a fixed condenser. The machines are pre-set to stop automatically after a desired number of turns have been made. In this way condensers of different

sizes can readily be formed on the same machines. These rolls, for they cannot as yet be called condensers, are carefully placed in heavy steel boxes, which in turn are placed in the big vacuum ovens shown in Figure 6. Baking for several hours at a high temperature under vacuum drives out all of the moisture in these partially completed condensers, preparing them for wax



Fig. 3. Automatic Cadmium Plating Machine, 83 feet in length. All metal parts are cadmium plated to make them rust proof



Fig. 4. A bank of Automatic Machines, almost human in their performance, turning out complete speaker pole pieces

impregnation. At a specified time, the vacuum pumps are stopped and wax is allowed to run in, filling up all of the space formerly occupied by the air and moisture and making the condenser unit absolutely moisture proof. The assembly of the condensers in their housings is accomplished on a straight line production basis, each operator having his own part of the work to do. Figure 7 shows the final electrical inspection of by-pass condensers after the assembly is completed.

From the Parts factory, the component units are transported by truck to the main factory, two blocks away, at Ontario and C Streets, where they are assembled into Philco Radio Receivers.



Fig. 7. Philco inspector testing completed By-Pass Condensers

Throughout the various stages of Philco manufacture, quality is predominant. Each part which goes into a Philco Balanced-Unit Radio is made of the finest materials and is subjected to the most rigorous tests and inspections before it is acceptable for use. Philco's factory processes have been scientifically engineered to such a point that there is minimum opportunity for failure of the units in performance. Philco quality standards are far above normal requirements because Philco Radio must operate perfectly under every possible receiving condition. Only Philco can offer such quality merchandise at such astonishingly low prices because only Philco is the largest selling radio in the world.



Fig. 5. The maze of Condenser Winding Machines, operating in a special room of never-changing humidity

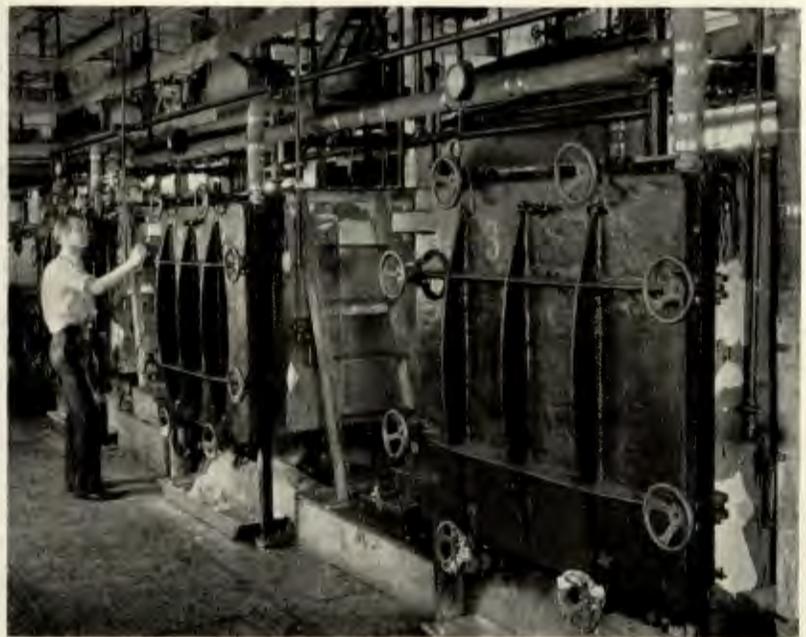


Fig. 6. Combination Vacuum and Wax Impregnating Ovens. This treatment makes Philco condensers absolutely moisture proof and trouble free

NEW TRANSITONE ADVERTISING KIT

Here is what you get:—two Cloth Banners, one for store, one for truck; one Outdoor Metal Sign, 6 feet x 2 feet; two Window Streamers; three Lithographed Window Displays in bright, attractive colors; two Window Transfers, for Window or Automobile, and a generous supply of Counter Folders.



The Three Window Display Cards in Colors

Philco dealers will get this Kit of Transitone Advertising Material for only

\$2.00

which is less than half its cost.



Philco Window Streamer



Outdoor Sign—Size, 6 feet x 2 feet, in Color

Order this
Kit from
your
Distributor



Give these Folders to prospective buyers—to help bring them back for a Philco Transitone.

This Cloth Banner can be used on your truck and in your store—put it in a conspicuous place.



Philco Dealers Get of Quota on

200 to 300% Balanced Tubes

Are You Getting Your Share of These

SOME Philco dealers are selling 200 and 300 per cent of tube quota. Some Philco dealers are not even selling quota. Some Philco dealers are not even selling tubes! The comparison almost brutally indicts the laxity in some organizations.

And if dealers could see the PROFIT DIFFERENCE it makes to their pockets they would be sharp and direct in their action to correct it.

Nothing except someone's *indifference* could permit such neglect of this marvelous item of profit.

Consider that the *average* dealer tube sales (including thousands who handle but a few sets) grossed \$1683 last year on all kinds of tubes.

Then, consider your present advantage as a Philco dealer, handling the world's largest selling radio and figure what *your* tube sales should gross, based on the volume of radios you sell.

With Philco selling more radios than all other makes combined, you have the strongest kind of right, as well as obligation, to expect at least your share of Philco Balanced Tube sales and profits.

It is perfectly obvious in analyzing the checkered national picture of Philco Balanced Tube sales, that the difference in results is wholly a difference in organization and effort.

With the public this year so amazingly Philco-minded that radio practically means PHILCO, there is a tremendous acceptance for Philco Balanced Tubes, as every dealer going after the business in the right way has proved by enormous increases.



An Attractive Philco Window Display of Spear & Co.

Frankly, the dealers who have not been doing a tube business are those who have not regarded themselves *in the tube business*—who think of tubes as a sideline of accommodation and a service item exclusively.

Don't longer overlook the tremendous money-making opportunities in the Philco Replacement Tube market. Put your replacement tube department on a business basis with a merchandising motive to get your full; legitimate profit on every tube sale possible.

Philco is giving Philco Balanced Tubes the greatest advertising support ever devoted to promoting tube sales. The advantages of Philco tubes are advertised directly or embodied in every Philco advertisement—in national magazines, newspapers and billboards, more than doubling any previous radio campaign.

Successful dealers are hooking up their selling efforts for these extra profits with the same energetic action that they put back of set sales.

They are using window, counter and store displays, direct letters, mailing cards, free tube-testing in a consistent campaign for this business.

You can just as readily get quota—double or treble—as any other Philco dealer. Train your radio service men to be tube sales-

men sales commissions. This is one of the best. Outside salesmen have splendid opportunities. Philco set you sell, place a complete renewal kit, two extra tubes.

Do this today—be sure your stock of Philco Balanced and complete. With such a stock there is absolutely no carry any other make of tube. By concentrating on a stock of Philco Balanced Tubes you can eliminate a needless investment in other tube lines. And with the tremendous prestige enjoyed by Philco Balanced Tubes, you can meet and satisfy the requirements of any customer.

You are doing any customer a genuine service when you sell him Philco Balanced Tubes, because it is an actual demonstrable fact which records in our possession prove, that they give far better satisfaction than any other type made.

And remember this: Philco tubes are never "gypped"—never dumped in your territory. Controlled production absolutely protects you. And on every sale you make you get your full margin of profit.

Why not give exclusive preference to this line of tubes, which not only insures better satisfied customers, but bigger profits, and genuine protection of the business you build against dumping and "special deals" permitting cut-price competition?

SEPTEMBER 11, 1931

SPARKS from DETROIT

The Car Radio Helps

* * *

And Now Boat Racing

* * *

Shows Abroad

* * *

Road Groups Gather



Chris Sinsabaugh—Detroit Editor

IT'S a little late in the week to be writing about the Harmsworth trophy race on the Detroit River. The less said about the final result of this motor boat classic the better, but there was one happening of interest to automobile people that is well worth recording.

There were more than 200,000 people looking on when Kaye Don, in the English boat, turned over on the first lap, who couldn't understand what it all was about when Gar Wood was flagged down, leaving only one boat left, the one piloted by George Wood, to continue. Outside of the favored few on the docks at the yacht club and those on the Whittier roof none knew what had happened. There was no way of informing the vast multitude that it was a walk-over, so for some little time the spectators stood around and wondered. Then you could see the crowds on the shores diminishing in size—they had started to go home.

How the onlookers learned about the disqualification of Gar Wood and Don puzzled the favored few until it was discovered that many of the cars parked on Belle Isle were equipped with automobile radio and that the information had come to their owners from the broadcast of the Detroit News. It was just another bit of evidence of the growing use of the automobile radio. Without it the crowds would have stuck until dark.

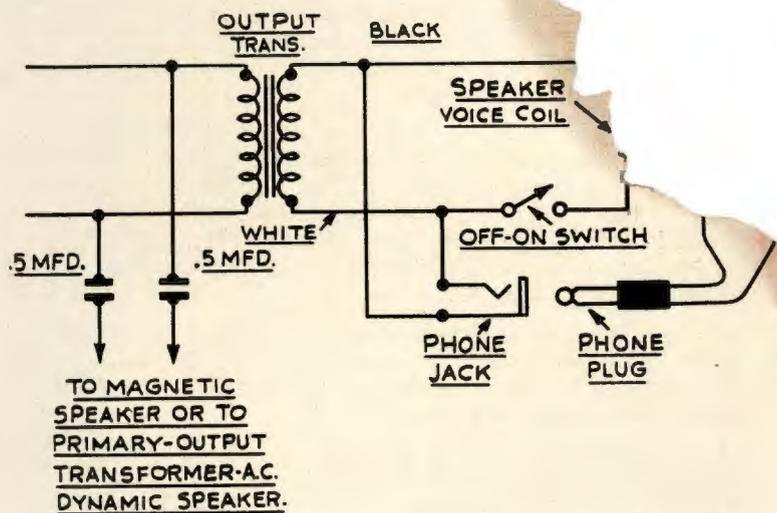
Reprint from Automotive Daily News

Philco Receiver

Radio Headphones

Service Page

Speaker with Philco Radio



Headphones can be connected to any of the Philco receivers without affecting the tone or volume of the loudspeaker. Connection is made simply by attaching the headphones across the speaker voice coil leads, terminals of which are brought out on the frame of the speaker.

Greater operating convenience can be had by connecting a phone jack across these terminals and then equipping the headphones with a phone plug for quick connection. By inserting an "Off-On" switch in the circuit as shown in the diagram herewith, it is possible to obtain reception through the headphones alone when the switch is open, or to obtain simultaneous operation of the headphones and loudspeaker when the switch is closed.

An extra magnetic speaker or an A. C. dynamic speaker with output transformer can be connected to a Philco receiver as shown in the first part of the accompanying diagram.

Connection is made from the two outside primary leads of the Philco output transformer to a pair of .5 mfd. condensers. The opposite sides of the condensers can then be connected to the extra speaker as shown. Care must be exercised to insulate the condenser connections, since this is the high-voltage side of the output circuit.

Improved Reception in Your Store Brings More Sales

A good, clear, radio demonstration in the store, the place where most prospects first display an interest in your merchandise, is a highly important factor in "getting down to business."

The success or failure of most of your sales is dependent to a large extent upon the customer's first impressions. Radio demonstrations to the average customer are either good or bad, and no amount of explaining about local interference or man-made static causing poor reception in the store will serve to erase the feeling that such reception is not in some way due to a fault in the set.

Many dealers are confronted with the handicap of being unable to give successful demonstrations in the store because of electrical interference in the neighborhood. In such cases when the interference cannot be eliminated at its source, the use of shielded lead-in wire will usually reduce the noise to a point where good radio reception can be obtained even in the most congested downtown locations.

When using shielded lead-in wire, it is usually necessary to ground the shielding at one or more points. This means a certain loss in efficiency of the antenna since the shield acts as a grounded plate of a condenser in close proximity to an ungrounded plate—the lead-in wire. By increasing the height and horizontal length of the antenna, however, greater pickup of the radio signal will result and the station signal will be in excess ratio to the noise and interference. The shielding should start as near the antenna as possible, and should continue without an electrical break to the radio set. In many cases it will be well to ground the shield both at the lightning arrester and at the ground terminal of the radio set.

A good lead-in and ground installation in the store, free from unsoldered or corroded joints, will further contribute toward better reception and less noise. In locations where no stations can be heard without an aerial, a convenient switch arrangement is usually desirable to permit quick change-over from one set to another.

These items, although initially more costly than a haphazard installation, will more than pay the difference on just one sale, and many sales will result from clear, noise-free demonstrations.

Installing New Rubber Bushings in Model 212 Tone Arm

The adjustment on the Model 212, which determines the descending position of the needle onto the record, may fail to hold in some cases. Investigation has shown that this condition is caused by the tone arm cutting through the two rubber bushings at the point where the arm is suspended. The tone arm is allowed to rest upon the suspension shaft, causing a loose fit and making it impossible to obtain a permanent adjustment.

New bushings, Philco part 4891, can be installed by removing the two nuts, the collar and the shaft, at the back end of the tone arm. When installing the new bushings, make a careful examination of the holes in the tone arm to see that the edges are free from burrs or sharp points.

Audio Howl in Model 270

A few cases of audio howl on the Model 270 have been called to our attention. If the shipping screws have been loosened so that the chassis is floating on its rubber supports and the howl persists, the condition can usually be eliminated by placing a metal tube shield over the second detector tube.

Fluorescent Glow in Pentode Tubes

A number of tubes, particularly the pentodes, are being returned to the factory marked "GASSY." Investigation shows that these tubes are not gaseous; in fact, they are all extremely good and when placed in a radio set will give excellent performance.

A violet glow around the inside of the glass is mistaken for the gaseous glow between the filament and plate, which characterizes a gassy tube. The real test for any tube is an operating test in a radio receiver. In case of doubt, the violet glow can be shifted about in the space between the plate and the glass by means of a magnetized screw driver, or better, a magnet. A gassy tube will not be affected in any way by the presence of magnetism. The fluorescent glow has absolutely no effect on the quality of the tubes, even though the glow is comparatively brilliant.

Caring for the Phonograph Motor

One of the most frequent reasons for service calls on radio phonograph instruments is distortion of record music, caused by uneven speed of the motor. The condition is often accompanied by a mechanical noise, and is usually caused by lack of motor lubrication, particularly on the governor friction pad.

Instruments which are used frequently for playing records should be lubricated at least once every six months. A good grade light machine oil should be used for the bearings and the governor friction pad, and a light cup grease for the gears of the motor. Access to the bearings can be had by lifting the turntable from the motor spindle.

In some cases, dirt becomes imbedded in the surface of the governor friction pad, after a long period of use, giving the pad a glazed surface where it contacts the governor friction disc. The pad should be scraped with a sharp knife before being oiled so as to soften the surface and allow the oil to penetrate into the felt. If this is done, the oil will be retained for a long period of time and the motor will therefore maintain its correct speed.

It is always a good practice when the service man is called out on a combination instrument to spend five minutes longer on the job lubricating the motor, regardless of the primary reason for the call. It will likely save another needless call at a later date.

PHILCO 24 Posters Will Bring Business to Radio DEALERS



With your name and address imprinted
on the Poster at no charge

Tell 'em where to buy!

THIS new Philco Poster is a real business getter. In strong, forceful colors, it will cause people to read and buy. Use this Poster as many Philco dealers are doing with paying returns. Philco Posters are everlastingly on the job selling radios for you. See your distributor about your Poster locations now!



A Philco Billboard in Barcelona, Spain

Three Brilliant Neon Signs for Outdoor and Indoor

The Vertical Neon Sign. Size: 5 feet 3 inches high by 2 feet 4 inches wide. Double faced. For use on A. C. current. Price, \$60. **You pay only \$30.**

The Horizontal Neon Sign. Size: 1 foot 5 inches high by 4 feet 1 inch long, extending 2 feet from wall. For use on A. C. current. Price, \$60. **You pay only \$30.**

Only \$30 to a Philco Dealer. Nowhere else can you secure a genuine Neon sign such as this at the price. It is due only to the fact that Philco has placed such a large order for these signs that this is true, and they not only pass along this saving to you, but have arranged with the Philco jobbers to pay half of the cost, thus saving you many dollars.

Order one of these signs from your jobber or your Philco Branch. They will pay half the cost.

All Prices are F. O. B. Philadelphia

A Neon Window Sign. Size: 20 by 10 inches. Price, \$19.80. **You pay only \$9.90**

The whole sign clearly outlined in Neon, reflected from the Neon border. The true and distorted idea is cleverly pictured with two bars of music above the name Philco. A permanent fixture for your window.



but...there are no seats for sale!



Beginning Oct. 12, from 8:15 to 10:00 P. M.
 Eastern Standard Time

PHILCO PRESENTS
LEOPOLD STOKOWSKI
 and the Philadelphia Orchestra in the
 world's greatest musical broadcasts

If you could secure eight choice seats to the historic Academy of Music in Philadelphia—to the glorious concerts of Leopold Stokowski and the Philadelphia Orchestra—

What a thrill it would give you!

What a chance of a lifetime!

What a sacrifice you'd make to take your family and friends!

But alas, you say—there are no seats for sale! Year after year they are over-subscribed. It is almost impossible to buy seats for these concerts unless you have been a previous subscriber.

But—if you have a good, modern radio—Philco can give you this: Eight seats, or more if you wish, to these marvelous concerts brought to you in the most spectacular broadcasts in radio history!

Not from the chill of a studio background, but direct from the stage of the Academy of Music, swept with storms of applause from a brilliant audience, Leopold Stokowski and the Philadelphia Orchestra will present a series of seven full-length concerts, under Philco sponsorship, over the entire Columbia Broadcasting System.

And you will be part of it all—as though present in person. The excitement—the animation—the arrival of notables—the hush as the master's baton is poised—the volleys of applause—you will thrill to it all.

For 17 years Stokowski has led the Philadelphia Orchestra, acknowledged the world's greatest musical organization.

Now, through these seven concerts, in historic panorama, starting with the early masters in the first program down through the centuries to our sophisticated moderns in the last—he presents the whole glamorous sweep of the music of the ages.

And acoustic tests confirm what trained ears have told, that good radios now being built give you these programs in almost their full concert value and grandeur.

Each will be a coast-to-coast broadcast—a full hour and three-quarters over every station of the Columbia Broadcasting System—the mightiest network ever assembled for a symphonic concert.

You will not want to miss a single program in this eventful series. Hear the first—hear them all. To be sure of the dates, save the schedule listed here. And then, better still, send for the Stokowski Concert Program, illustrated with Leopold Stokowski's portrait and containing the story of the music you will hear.

Broadcast Over Every Station of the Columbia Broadcasting System

Monday, October 12—Pre-Classical	Saturday, January 16, 1932—Modern German
Saturday, November 21—Classical	Saturday, March 12, 1932—Modern Russian
Saturday, December 5—Romantic	Saturday, April 2, 1932—Modern American
Saturday, December 26—Neo-Classic and Modern Romantic	

From 8:15 to 10:00 P. M., Eastern Standard Time

Under the sponsorship of PHILCO—World's Largest Radio Manufacturer

Accredited musical organizations, societies, schools, academies and high schools will be supplied on request with a Philco Superheterodyne for the reception of this remarkable series. Address Philco, Philadelphia, Pa., or your local Philco dealer. © 1931, Philco

STOKOWSKI CONCERT PROGRAM—FREE

IT TELLS: when the concerts will be broadcast; what will be played; who wrote the compositions; the significance of each age of music.

PHILCO, Philadelphia, Pa.

Gentlemen: Please send me the Concert Program for Stokowski-Philadelphia Orchestra Broadcast Series sponsored by Philco.

Name _____

Address _____

City _____ State _____

S. E. P.