The new

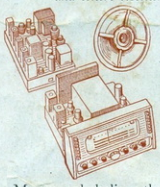
SCOTT

RADIO PHONOGRAPH

. . . Series 800

Designed to be desired...

The Scott is desired and admired both by those who seek flawless reproduction of recorded music and high quality network broadcasts and by the radio "bug" who wants an instrument that will pull in transocean broadcasts quickly and clearly. And it is particularly sought and valued by people in those localities where radio reception is difficult and where listeners must reach far afield.



The new Scott is in effect two instruments, (1) a specially designed audio amplifier and speaker system with characteristics of the costliest professional sound-reproducing systems, and (2) a powerful Scott-engineered superheterodyne incorporating many advanced and exclusive developments of our Research Laboratories. Descriptive details follow.

NUMBER OF TUBES

Most people believe that any radio employing a great number of tubes is designed chiefly as a super-distance receiver. While it is true that certain additional tubes do increase a receiver's distance-getting ability, modern vacuum tubes perform many other important functions which are of vital interest to the discriminating music lover who wants the finest reproduction of recorded music and of the new FM broadcasts.

For instance, the greater fidelity range of the Scott, the lack of detectable distortion on heavily recorded passages, and the absence of certain annoying background noises are all, in a large measure, due to the *manner* in which additional tubes are used in the instrument.

To provide the ultimate in tonal perfection and smoothness of performance, 19 tubes and, in addition, 2 rectifier tubes, 2 tuning eye tubes and 1 voltage regulator tube are incorporated in the new Scott 800.

THE FIDELITY RANGE

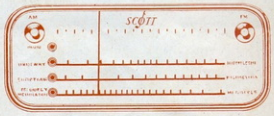
All musical tones, as well as the human voice, are measured in terms of the number of vibrations or "cycles" per second. For instance, the extreme bass notes of an organ are often as low as 50 cycles per second, while the violin most frequently plays in the 8,000 to 10,000 cycle range. The other major musical instruments have frequency ranges that fall somewhere between these upper and lower limits, and the harmonics of a few reach even higher or lower.

It is important to have at least a rudimen-

tary knowledge of these fundamentals in selecting a modern radio-phonograph, for while technical considerations make it impractical to transmit the complete audible range on AM broadcasts, the new FM stations are capable of bringing you a musical range extending from 30 cycles to well above 12,000 cycles per second. It will be obvious, therefore, that unless the audio amplifier of a radio combination is capable of reproducing this complete range of musical or vocal vibrations, the sound you hear from the loud-speaker on FM broadcasts will be little better than an AM broadcast, and the reproduced music will lack the quality of naturalness.

Scott coils—Scott-wound for Scott performance

Hearing an FM broadcast through the new Scott 800 is an inspiring and thrilling experience. You hear clearly the "small, soft voices" which give the symphony orchestra's music texture and depth. The resonant, brooding song of the viola, the strong, foundation music of the double bass, the celestial voice of the harp, the mellow, reedy quality of the oboe, the brassy vigor of the trumpet, and the bell-like tinkle of the triangle are heard individually in all their beauty.



The amplifier and speaker system of the ordinary radio-phonograph combination is built at low cost and has a fidelity range that seldom exceeds 4,000 or 5,000 cycles. With such a limited capacity, it is obvious that the tonal characteristics of the various musical instruments are only partially reproduced and, as a result, the various orchestral sections become confused and jumbled in a solid mass of sound.

The Scott, however, is designed to reproduce the entire frequency range that is recorded or transmitted, and particular emphasis has been given to FM broadcasts where a greater tonal range is available than on the regular broadcast bands.

In technical terms, the frequency response of the Scott 800 is from 30 to 8,500 cycles per second on the short wave and AM bands, as no such stations, to our knowledge, broadcast beyond this limit, but for FM broadcasts the full fidelity range of the amplifier (30 to 15,000 cycles) is available.

THE PHONOGRAPH

The new Scott 800 incorporates a highly developed built-in phonograph input system that is the result of three years' experiment and research. While a Scott has always been known for its superb reproduction of fine recordings, this new system provides what we believe is undoubtedly the most clean-cut and lifelike reproduction of recorded music that has ever been developed.

A number of changes have also been made in Scott amplifier system so that it will faithfully reproduce the greatly extended fidelity range of the new Vinylite recordings and the high fidelity importations.

The complete combination uses a precision-built drop-type record changer which employs a pickup matched to the full fidelity range of the Scott amplifier system.

POWER OUTPUT

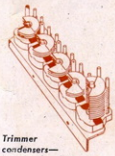
The term, Power Output, usually expressed in watts, designates the ability of the amplifier to reproduce loudly recorded or broadcast passages without distortion. Other things being equal, the higher the power output of the reproducer, the less the distortion, operating at normal listening levels.

It is obvious, therefore, that a high quality amplifier with a full fidelity range must also have adequate power output or *handling capacity* in order to provide the ultimate in perfect reproduction of records or broadcasts, the object being to reproduce the full power, depth, and richness of heavily recorded passages, *rather than mere loudness.*

Dial assembly — fine as a Swiss watch

The average radio-phonograph combination is ordinarily put to just average use, for the most part being confined to a few comedy or mystery broadcasts and more or less frequent playing of popular recordings. Under such conditions, the usual small radio is quite satisfactory, and only a comparatively low power output (1 or 2 watts) is necessary.

To make a simple test with the average commercial combination, select a recording that has several soft passages with only one or two instruments playing, followed by one in which the entire orchestra participates. An example is the new RCA Victor plastic high fidelity record No. 18-0002 of Richard Strauss' *Till Eulenspiegel's Merry Pranks.*



Trimmer condensers— . . . thumbnail size

Set the controls of the combination for normal room volume while the soft passages are playing. Note that when a fortissimo passage is heard, the poorly engineered combination tends to blast, distort, and "spill over." The listener subconsciously cringes and reaches out to turn the volume lower, *even though the music is heard at an ordinary volume level.* The fact that it is distorted makes the passage sound several times as loud as is actually the case.

In making the same test on the Scott 800, note that the sheer beauty of the music seems to swell out easily, powerfully, and smoothly, into all parts of the room, and you have no subconscious tendency to reduce the volume. Instead, your enjoyment of the rich tonal texture is increased because the full majesty and grandeur of the passage reaches your ear without distortion.

The cost of incorporating such unusually large handling capacity into a fine quality amplifier is considerable, but as the Scott 800 was designed to bring a *living performance* to your home, a power output of from 20 to 40 watts has been provided.

OPERATING FLEXIBILITY

The Scott has always been the outstanding choice of the musical hobbyist or male enthusiast who by manipulation of this multi-control instrument, could obtain results not even approached by a simplified or streamlined product of the production line. However, it often happens that children, or those not inclined to operate the various controls, wish to hear their favorite programs through a Scott. Older Scott models made no provision for this, because no dependable method of semiautomatic operation had been perfected. During the war, the Scott Research Laboratories experimented intensively with control methods of this type in connection with precision electronic equipment designed for the United States Navy, and discovered a number of important principles which are now incorporated in every Scott.

The instrument panel of the Scott 800 is so arranged that the receiver may be operated either by means of automatic pressure contact switches or manually by the seven control knobs. Even a small child can turn on the radio, select any one of twelve AM and FM stations, or turn the radio off by pressing lightly on a key.

On the other hand, for those to whom fine music or radio reception is a fascinating pleasure, a second section of the instrument panel allows direct use of the seven control knobs so that the full capabilities of the instrument may be enjoyed.

Several of the control knobs on the Scott 800 will not be found in the ordinary home-type radio-phonograph combination and when used in combination with each other, will enable you to secure record reproduction and radio reception which are a continual source of amazement to those who are not familiar with the Scott.

The Scott does not use the conventional single "tone control," which at the maximum setting merely cuts off bass frequencies, thereby giving *the effect* of higher fidelity, or at minimum setting cuts off the high frequency giving an unnatural bass or boomy quality. *Instead, two separate controls are used, the basic principles of which are entirely different from those used in the design of the ordinary single control.*

1. BASS CONTROL. Rather than having two or three widely separated steps, this control is *continuously* variable throughout its complete range, allowing for even the slightest adjustment from maximum to minimum settings. In operating this control, note that as you rotate it toward maximum, there is absolutely no change in the quality of the higher frequency reproduction. You merely increase the *intensity* of the bass without affecting the naturalness of any orchestral instrument.

2. TREBLE CONTROL. Also continuously variable without arbitrary steps. There is no effect whatsoever on the bass frequencies as you rotate the control. Similar in principle to the bass control, it merely amplifies or intensifies the higher frequencies.

These two controls, when used in combination, can provide natural and accurate musical reproduction under a great variety of acoustical conditions. A recording may be imperfect, as when an artist stands too near the microphone. Living room acoustics vary widely. Chain broadcasts may be deficient in treble or bass.

3. VOLUME CONTROL, for regulating audio frequency gain.

4. SENSITIVITY, or R.F. gain control, acts much the same as the accelerator on your automobile, providing more "power" when you need it for distant reception, less when not required. Proper operation of this control also minimizes interstation noise and interference. At maximum position, an efficient noise limiter operates on short wave tuning ranges.

5. TUNING KNOB. A smooth-operating, professional type control, geared to an 8.5 to 1 ratio.

6. WAVE BAND SWITCH. Silver contacts, the same as those used on highly developed professional instruments, are employed to insure quiet operation.

7. VARIABLE SELECTIVITY CONTROL. For station separation, particularly in the short wave tuning ranges where many stations are often located within one division of the dial scale. Three degrees of selectivity are provided so that in combination with the treble and bass controls, any degree of fidelity may be chosen; at the same time, the receiver can be adjusted for long distance reception where maximum selectivity and sensitivity are desired.

TUNING BANDS

Broadcast Band, AM Section, 540 to 1,600 kilocycles. Short Wave Section, 5.8 to 18.2 megacycles containing the 49, 40, 35, 31, 25, 19 and 16 meter bands, on which the principal short wave stations of the world now operate. A separate logging scale is provided so that any short wave station may be instantly retuned without the usual "fishing around."

Frequency Modulation Section, 88 to 108 megacycles, the new permanent band recently allocated to FM stations by the Federal Communications Commission.

THE SPEAKER SYSTEM

A fine quality amplifier is no better than the speaker system, for unless the speaker is capable of passing without distortion the extremely high frequencies reproduced by the amplifier, the voice and music reaching your ears will be limited to the electrical characteristics of the speaker.

The Scott 800 uses a heavy duty, fifteen-inch dynamic reproducer with a built-in coaxial speaker and self-contained dividing network. This reproducing system is designed to our own specifications so that the efficiency of the audio amplifier is employed to full advantage. All lower (bass) frequencies are reproduced through the larger speaker and the dividing network automatically shunts the higher (treble) frequencies through the coaxial speaker which is specially designed to reproduce these higher tones and overtones, with the greatest of fidelity.

ANTENNA SYSTEM

Provision is made for using a loop antenna for broadcast and short wave bands, and a built-in, folded dipole antenna may be used for reception of FM broadcasts. These antennae give satisfactory performance for metropolitan areas. In the more remote areas or where good performance cannot be obtained with a built-in antenna, two outside antennae are recommended. Connections for a double doublet antenna system and a separate dipole for FM are provided at the rear of the tuning chassis.

THE SCOTT VIDEO

For listeners located in television areas we can furnish, in limited quantities, a separate television receiver—a Scott Video—that may be connected to the Scott 800. This unit is installed in a Chippendale cabinet designed by Walter Dorwin Teague exclusively for Scott.

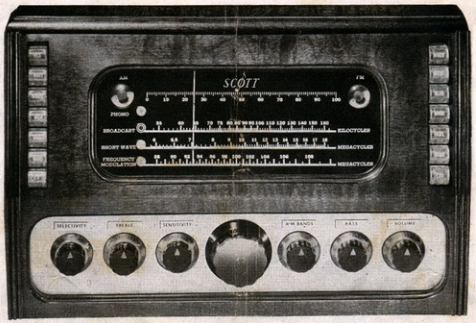
The set has continuous tuning from 44 to 216 M.C., covering all 13 television channels. One tuning control does the entire job—there is no need of band switching.

Here is television at its best, with negligible eye strain, for the set provides a steady, non-flicker picture by means of an automatic, synchronizing-type of lock-in control system.

One delightful feature of the Scott Video is that it can be viewed in a normally-lighted room because of the high picture brightness, and the elimination of all unnecessary panel controls makes for greater simplicity of adjustment.

The 12-inch tube provides an area great enough to be viewed comfortably with every detail apparent. A smaller surface is difficult to view by more than two people, while a larger screen does not provide any increase in reproduction of detail.

All Scott dealers in present television areas have a Scott Video in operation and we urge you to call for a demonstration to see television at its finest.

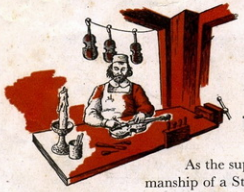


THE LOOKS OF THE SCOTT

Created by the famous designer, Walter Dorwin Teague, the panel of the new Scott in its restrained dignity and functional style, reflects the true elegance of the instrument it controls.

Rich in contrast of soft, warm mahogany with ebony controls against silver grey metal, this distinguished panel is rich, too, in modern convenience. Separate tiers of Lucite pressure switches and separate tuning indicators are provided for FM and regular AM stations. The multi-band dial is side-illuminated for uniform vision.

The entire panel and chassis assembly can be snap-released to move forward effortlessly, revealing the entire tuning chassis for easy tube replacement or simply to say to a friend, "Here is elegant engineering!"



Cabinets

TO COMPLEMENT THE FINEST SETTING

As the superb craftsmanship of a Strad reflects the musical quality of the violin, so do the lines, color and texture of the new Scott cabinets bespeak the perfection of the peerless modern instruments they house.

Styled to complement the finest of present-day settings, this new Scott furniture looks ahead with taste to the feel and tone of the most modern décor, for tomorrow and beyond.

The exact shade of bisque finish which distinguishes the bleached mahogany veneer in the finest of these cabinets is available in harmonious units of fine modern furniture.

SCOTT CHIPPENDALE

Mahogany veneer. Inspired by a 1755 Chippendale cabinet. Corners softened by quarter-round fluted columns. Period hardware. Ogee bracket foot, skillfully reproduced, gives solidity to the cabinet.

Veneers selected to preserve the feeling of the original piece—hand rubbed to bring out the full richness of fine mahogany. Speaker doors have semi-invisible hinges; concealed hinges on drop-front panel.

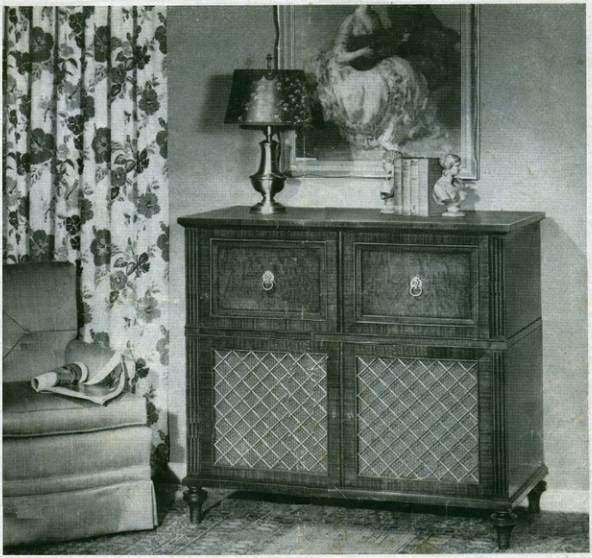
RICHARD CROOKS: "*. . . I did not believe it humanly possible for any electrical instrument to reproduce sound as faithfully and incredibly natural as does your instrument. The overtones and harmonics of voice and instrument are approaching a third dimensional value that I have never heard in any other instrument.*"

SCOTT MODERN

Bleached Mahogany veneer. Beautifully proportioned and restrained in design. Fielded and beveled doors give added depth and richness. Handles in brushed brass are interesting and fully functional.

Open speaker doors do not project beyond cabinet face—further enriched by an ample ring pull in brushed brass. Semi-invisible hinges on speaker doors, and concealed hinges on drop-front panel.

DEEMS TAYLOR: "... *The highest compliment that I can pay the Scott is to say that it has no 'tone quality' of its own whatsoever. It brings me the speech or the music exactly as it went on the air from the studio, producing no impression of the presence of any transmitting medium between myself and the source of the sound.*"

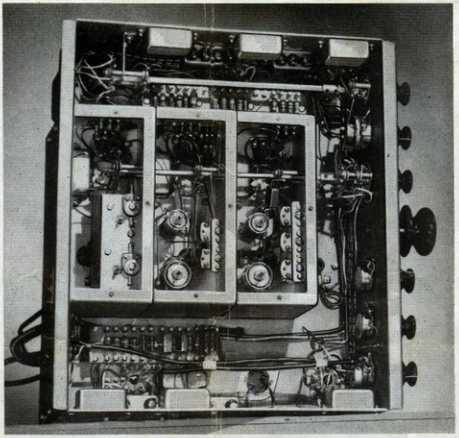


SCOTT REGENCY

Mahogany veneer. An achievement in furniture design . . . combining the finest details from English Regency into one superb cabinet for the modern home. Scaled to present-day living room sizes.

Crossbanded panel frames enrich the design, and balance the figured panels. Antique brass grille and lion's head pulls. Invisible hinges are used to support the drop-front panel.

LAWRENCE TIBBETT: "*. . . I have never felt such a sense of reality on either broadcasts or recorded music. It seems as if the tone does not come from the speaker compartment but from the very walls themselves. You seem to have completely eliminated the artificial quality of commercially available reproducing instruments.*"



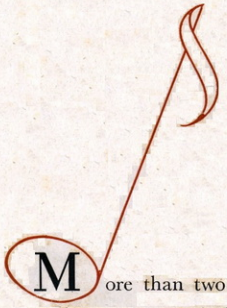
DETAILS OF SCOTT "ELEGANT ENGINEERING"

R. F. SYSTEM

One highly efficient stage of radio frequency amplification is utilized for both frequency modulation and amplitude modulation. For broadcast and short wave bands a triple grid super-control amplifier tube is utilized in a tuned grid circuit. The antenna is coupled to the grid of this tube by means of an R. F. transformer having an electrostatic shield between the primary and secondary to eliminate all stray capacity coupling and to reduce the transfer of electrical noise to the grid of the R. F. amplifier tube.

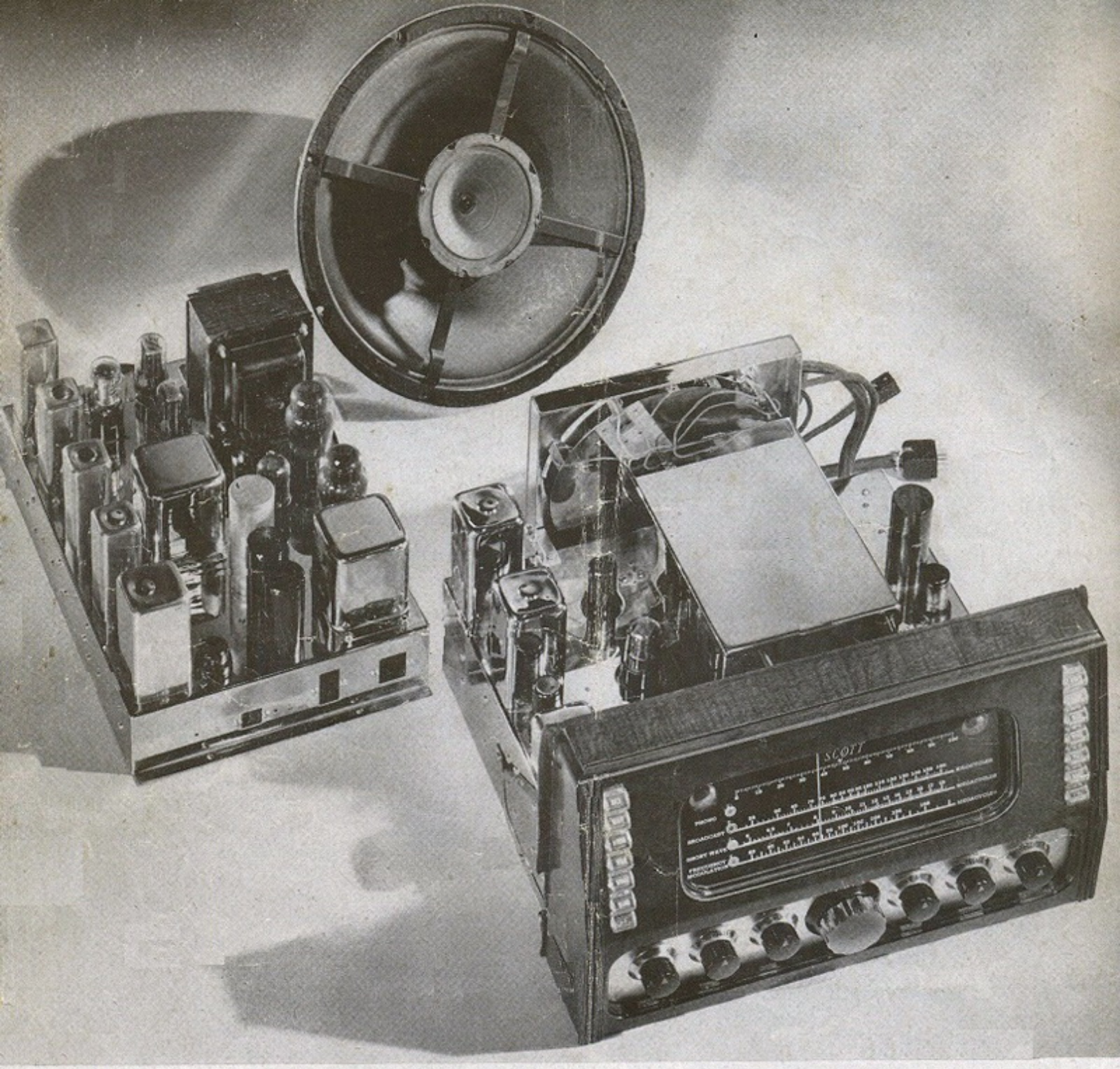
AUDIO SYSTEM

Three stages of audio amplification are used for both AM and FM reception. First stage is used as a bass amplifier; the second stage as a driver inverter; third stage, push-pull power output providing 20 watts undistorted output. Inverse feedback is used in the power output stage to keep distortion and hum at minimum.



More than two decades ago Scott Radio Laboratories struck the high note in radio craftsmanship—and have held it ever since! The reputation of Scott Radio-Phonographs as "the world's finest" is so universally recognized today that a Scott in your living room bestows distinction akin to that of a custom Rolls Royce in your driveway.

The Scott 800, incorporating more than twenty years' experience in the building of precision equipment, is an entirely *new* instrument, built to some of the most rigid specifications known to the electronic industry . . . and housed in attractive cabinets designed by master furniture stylists to blend with traditional settings or distinguish the finest of modern décor



A glance at the chassis of the new 800 Series Scott is enough to make anyone say, "Here is elegant engineering!"—and instantly to convince even the most enthusiastic owner of *prewar* Scott that the *new* Scott, by a wide margin, is the finest ever produced by Scott—long world-famous for the finest in radio-phonographs.