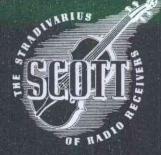
SCOTT



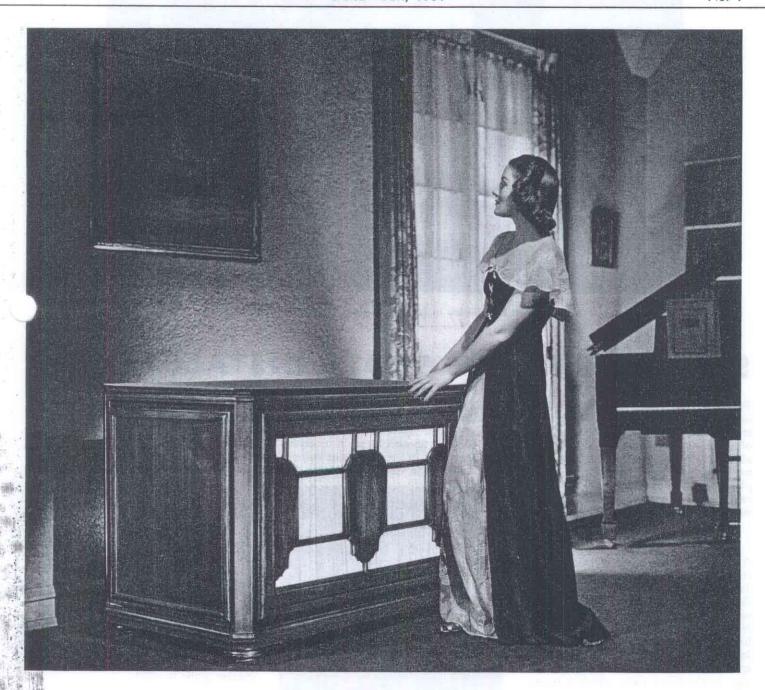
NEWS

NEWS OF LATEST DEVELOPMENTS IN THE SCOTT RESEARCH LABORATORIES

Vol. 10

DECEMBER, 1937

No. 7



The SCOTT AUTOTROPE

The Scott Autotrope Illustrated Above Shows the Latest and Newest Phono-Radio Combination—a Special High Fidelity Scott Receiver With New Autotrope Automatic 30 Record Changer Which Plays 10" or 12" Records Mixed, Either One or Both Sides of the Record. Console Design
by
ROBERT LUTYENS, F.I.A.A.



Built-In Scott Installation in Library of Mr. Ray June, Los Angeles, Cal.

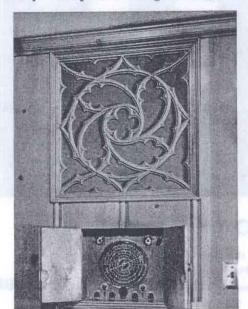
SPECIAL BUILT-IN SCOTT INSTALLATIONS

For a number of years, the Scott Laboratories have been designing special installations for fine homes where consoles of standard designs are not always suitable for other furniture in the home. Or, as often happens, there simply is no place for a radio console, and in such a case it is necessary to install a built-in installation in a bookcase or wall.

A Typical Wall Installation

A typical example of a fine built-in installation is that in the home of Mr. Ray June, ace cameraman for Metro-Goldwyn-Mayer. From the illustrations on this page you will note that the SCOTT PHILHARMONIC chassis is fitted behind two small attractive doors in the wall of the library with the speaker behind the grille near the ceiling. In the living room, which is shown on the opposite page, there is an extension loud speaker behind a similar grille, which you will note directly over the oil painting.

Underneath the Philharmonic tuning chassis are two additional doors behind which is an automatic record changer. Thus Mr. June enjoys radio broadcasts or recorded music in either room whenever he wishes. The arrangement is such that the two speakers can be operated simultaneously in both rooms or individually. Mr. June has long been an en-



thusiastic Scott owner and the photographs shown were recently taken by him to show his very beautiful SCOTT installation.

An Interesting Concealed Installation

Another type of built-in installation which is always interesting is one where the speaker is entirely concealed behind a tapestry, which conceals the speaker and serves as a grille cloth. The owner of this equipment can amuse himself with new acquaintances by switching on his SCOTT from another room, and the mystified expressions on his friends' faces as the music fills the room, apparently coming from nowhere, is very amusing, for there is not the slightest sign of a radio or conventional loud speaker grille in sight.

Installation for Mayor Kelly of Chicago

One of our most recent installations is that in the home of Mayor Kelly of Chicago. The complete equipment consists of an automatic record changer, a recorder, and a SCOTT PHILHAR-MONIC, all mounted in a closet in the library. The Mayor's use of the recorder is two-fold. First, he records all his peeches for his personal library of records. These albums are classified according to subject matter and cross indexed in various ways for ready reference. Second, when the Mayor broadcasts, the equipment is used to record the broadcast directly from the air, thus affording him the opportunity of later studying his broadcast as it went out over the air.

A New Type of Armchair Installation

A type of installation that has recently met with considerable favor is an armchair unit which may be conveniently tuned at the side of your easy chair. The detailed drawings show a special console of this type we recently had designed for a customer to match the knotty pine panelling in his living room. Another type of armchair tuning is a small compact console next to the chair or divan, with the chassis and power amplifier installed in it, and the loud speaker mounted in a separate console on the opposite side of the room. This speaker console matches the design, fin-

i, and proportions of the tuning conde. All connections between the two units are by means of a flat cable which is run underneath the rug. This arrangement is ideal from a musical standpoint because the sound waves travel directly toward you.

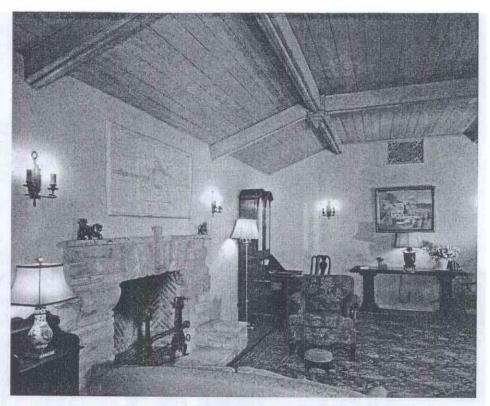
Bookcase Installations

Probably the most popular type of built-in installation is that which uses either a part of a library bookcase or a special cabinet which is a combination radio console and bookcase. Some very interesting installations of this type comprise two units, one housing the tuning chassis, and the other, the speaker.

In the tuner chassis, doors are generally used which completely conceal the dial of the receiver when it is not in use, or after a program is tuned in, while in the speaker console, either a grille is used which can be designed so that it is very inobtrusive, or it can be arranged behind doors which, when closed, look like regular book shelves. In this case, only dummy book bindings are used on the first of the doors.

Ultra-Modern Installations

In many ultra-modern settings chromium trimmings and mirrors, both clear and colored, play a large part in the



Extra Speaker Above Painting in Living Room.

decorative scheme. In one of Chicago's luxuriously furnished pent houses is a very attractive Scott installation in the solarium or sun room, which is entirely enclosed by glass. The furnishings are all in leather and chromium, and the beautiful chromium finish of the Scott chassis and amplifier makes it unnecessary to use any cabinet whatsoever.



View of Speaker Installed in Living Room

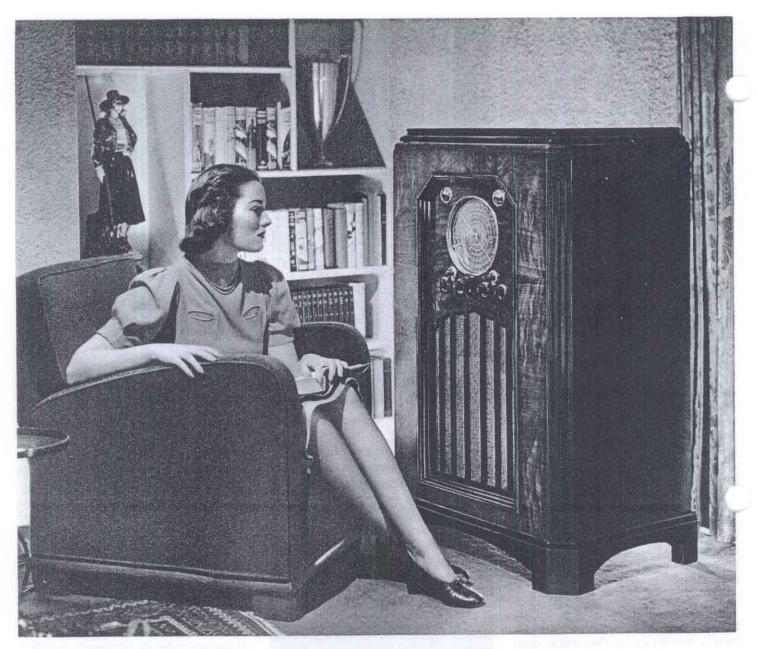
Installations in Antique Cabinets

Large numbers of SCOTT receivers have been installed in Italian, French and Old English consoles, some many hundreds of years old. They make extremely interesting and unique installations, and this type of work is carried out by craftsmen who are highly skilled in the handling of antiques.

A Special Service to Scott Purchasers

If you are under the impression that this special installation service is available only to those who want very elaborate cabinets for costly homes, you may be surprised to know that the cost is not excessive. As a matter of fact, a wall or library installation, especially if designed while the home is being built, is in some cases less than a console installation. Our designing department will be very glad to offer suggestions if you will submit a rough sketch of the room interior where you plan to install a SCOTT.

We are also in a position to furnish practically any style or design of console that you personally prefer, as many of our prospective purchasers have their own ideas of radio console design, or have period furniture which requires a certain design or type of cabinet to harmonize with the other furnishings. We will be glad to submit suggestions for special installations.



The New Tasman with 30 Tube Scott Philharmonic

New 30 TUBE SCOTT PHILHARMONIC

THE FINEST HIGH FIDELITY CUSTOM BUILT RADIO RECEIVER IN THE WORLD

The SCOTT PHILHARMONIC is a precision radio receiver built to order in limited numbers for those who desire the ultimate in a deluxe instrument. It is as definitely superior to the ordinary type of radio in tonal quality, undistorted power, and in its quieter and clearer reception of programs from foreign stations in all parts of the world, and in construction and quality, as the performance and quality of a fine custom built automobile such as the Rolls Royce, the 16 cylinder Cadillac, the 12 cylinder Lincoln or Packard, is superior to the regular type of automobile which has

been definitely designed to be built by the thousands per day in a high speed, massproduction plant, at the lowest possible cost per unit.

Critical Comparison Reveals Higher Quality

This does not mean that the mass production type of automobile is a low quality product that will not give satisfaction to the purchaser and full value for the price paid, but simply that the mass production car is definitely not in the same quality group as the more highly developed, custom

built Rolls Royce, Cadillac, Lincoln or Packard, either for smooth, effortless performance at all speeds, luxurious riding comfort, superior construction, and in the quality of materials used. In the same way, we believe a critical comparison between a Scott and the ordinary type of mass production radio, will quickly reveal the same degree of difference in quality.

Why the Scott Philharmonic Tune. Chassis and Amplifier Are Built in Separate Units

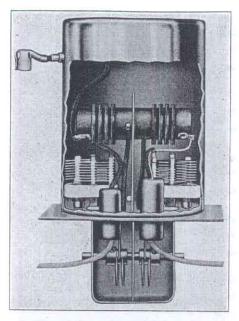
The illustrations on the following pages are

Page Four

shown to give some idea of the appearance, preciseness, and quality of the SCOTT PHILHARMONIC. In order to achieve the very finest High Fidelity tonal reproduction free from harmonic distortion and hum on I frequencies, and assure accurate caliation over a long period of time, the tuning chassis is built in one unit, and the audio amplifier in another, instead of the cheaper construction employed in the ordinary type of radio receiver where both tuner and amplifier are incorporated in a single unit, which makes it impossible to secure the most perfect reproduction and maintain accurate calibration, owing to the power transformer and chokes limiting low frequency reproduction by their introduction of hum when placed near the low frequency realtors in the audio amplifier and heat generated in transformer, rectifier and output tubes altering coils and condensers so changing calibration.

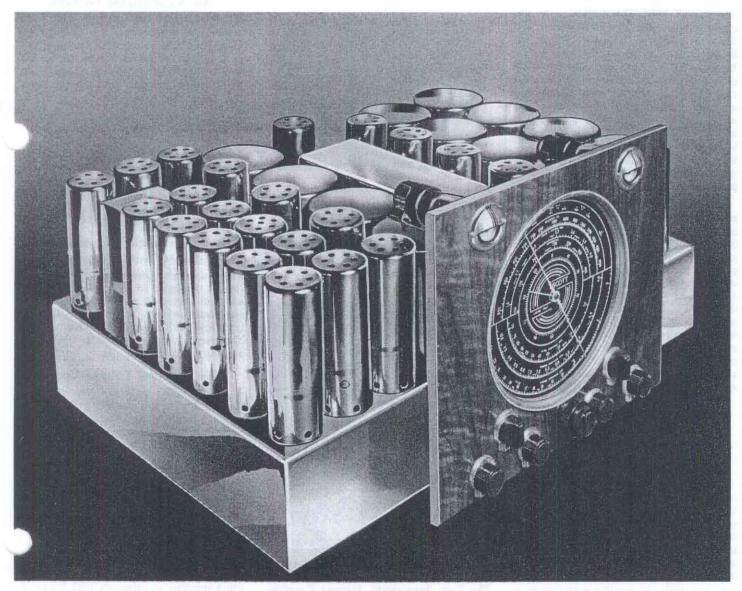
Every Scott Philharmonic Built With Precision of Fine Watch

So different in appearance is the Scott Phil-



I.F. Transformer Showing Four P1. Litzendrath Coils, Air Tuning Condensers and Part of HI-F1 Control.

harmonic from the ordinary radio receiver, that when you see one for the first time, you will probably remark, "This show model is very beautiful, but I would like to see your regular receiver." Many find it difficult to believe that the beautifully finished, gleaming, chromium chassis is not a "show model," but is actually the way every receiver is finished. However, Scott receivers are not chromium plated merely for show, but to protect the metal parts indefinitely and preserve the finish for years in locations near the sea coast and in the many tropical, humid locations in all parts of the world where they are now in use. Should you visit the Laboratories you can inspect the inner construction of the SCOTT PHILHARMONIC, and will be just as much amazed at the precision workmanship and high quality components which are never seen by the purchaser, as you will at the beautiful finish outside, for every instrument is built with the preciseness of a fine watch.



The Scott Philharmonic Tuning Chassis

Built Up to a Quality Standard, Not Down to a Price

Some idea of the very advanced design, the quality of parts, the preciseness of construction, and general appearance of the SCOTT PHILHARMONIC will be obtained by a remark recently made to me by a Scott owner, "Mr. Scott, if my receiver never played a note it would still be worth every dollar I paid just to look atfor it is always an inspiration to me to know there is still something one can buy that is built up to a quality standard, and not down to a price."

The photographs given on this and the following pages are shown to give some idea of the actual SCOTT PHILHAR-MONIC instrument itself, with cut-away sections to show the class of construction of some of the parts that are never seen, because they are normally covered by the shields and bases.

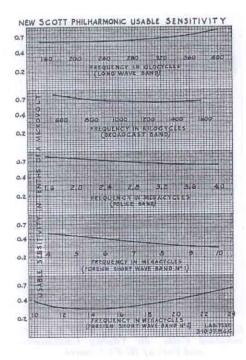
Most Advanced Radio in World Today

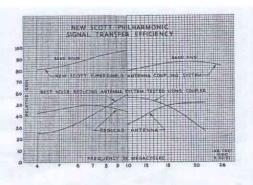
The SCOTT PHILHARMONIC is, we sincerely believe, years ahead in design, and the most advanced, highly developed, efficient radio receiver in the world today. Incorporated in it are not only the latest proved developments known to radio engineering, but in addition many special and exclusive developments of our own Research Laboratory (generally conceded to be one of the most modern radio research laboratories in the world), which are in large measure responsible for the finer tonal quality and the quieter, clearer reception of programs received from foreign countries.

In the automobile field the prospective purchaser can make his choice from a number of custom built, highly developed cars, but to the best of my knowledge, I know of no radio receiver that even closely approaches the high quality standards of construction, the perfect High Fidelity reproduction, and long distance performance of the SCOTT PHILHARMONIC. This, I realize, is an extremely strong statement, but it is made with the confidence that it can be fully substantiated by laboratory tests or by a side by side comparison with any other receiver being built today, irrespective of price or number of tubes.

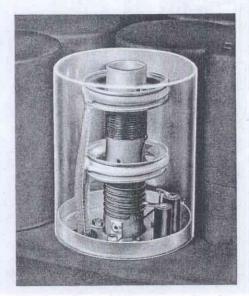
Laboratory Performance Curves Prove Superiority

When claims of superiority for any product are made, we believe they should be fully substantiated with conclusive proof. The exact laboratory performance curves reproduced on these pages are published so that they may be compared with the laboratory curves of any other radio receiver. To many it may seem that the performance and high efficiency shown by these curves is impossible of accomplishment by any radio receiver that has been designed up to this time, with the possible exception of a few special costly laboratory instruments









The Scott Supershield Antenna Coupling Unit Used on Foreign Short Wave Bands.

which are not available to the general public. As a guarantee that the curves shown actually represent the performance and efficiency of the SCOTT PHILHAR-MONIC, your order will be accepted with the distinct understanding you are at libert to have the receiver purchased by you measured by any nationally recognized, competent engineering laboratory, and if the performance curves of the receiver delivered to you do not equal or exceed in efficiency those shown on these pages, not only will every dollar of the money you have paid be refunded, but also the complete cost entailed by you in making such laboratory test.

For those interested in the technical specifications of the SCOTT PHILHAR-MONIC, the following details are given.

Tubes and Circuit

Thirty of the latest type tubes are used in a circuit employing two stages of R. F. amplification, 4 stages of I. F. amplification and 4 stages of Audio amplification.

All Wavelengths Covered

All wavelengths are covered from 3.75 meters (80 megacycles) to 2000 meters (150 Kc.) making possible the reception of programs on the ultra short waves, the regular short wave bands, the police bands, the standard broadcast band, and the European long wave bands.

Higher Fidelity Reproduces Every Tone Audible to Human Ear

Perfect reproduction of every tone, overtone or harmonic is made possible by the special High Fidelity system developed in our research laboratories, which covers the entire audible range of the human ear, from as low as 30 to as high as 16,000 cycles.

Four Stage Audio Amplifier Gives Undistorted Tone at Any Volume

The four stage audio amplifier has a pure class A output of 40 watts, which provides sufficient power to reproduce even a full symphony orchestra at its original volume, if desired, with every note as clear and undistorted as you would hear it if you were actually in the Auditorium.

Tone Balanced Volume Control

A very highly developed tone-balanced Volume Control system follows the response of the ear at varying degrees of volume at all frequencies, maintaining a perfect balance between the low, middle and higher frequencies, so allowing music to be as thoroughly enjoyed when listened to at low volumes as it is when heard at normal or high volumes.

Extremely High Usable Sensitivity

The clear reception of distant foreign strtions is made possible by a number of spicial circuits and developments of our research laboratory (patents applied for), which provides an extremely high degree of USABLE Sensitivity, approximately 0.3 of

a microvolt on the foreign short wave bands between 11.5 and 71.5 meters, and 0.7 of a microvolt on the long wave, broadcast, and police bands. A variable control is provided to allow the sensitivity to be adjusted xactly at all times to the prevailing reception conditions.

Two A. V. C. Systems Prevent Fading Signals

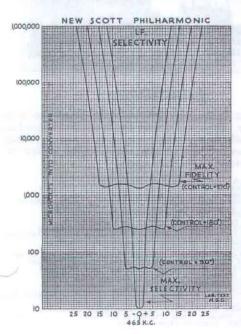
Instead of the usual single Automatic Volume Control System incorporated in the ordinary radio receiver, in the SCOTT PHILHARMONIC two separate and very highly developed efficient Automatic Volume Control Systems are used on both the R. F. and I. F. amplifiers, assuring the reception of programs from distant foreign stations with the usual fading in and out of the signals practically eliminated.

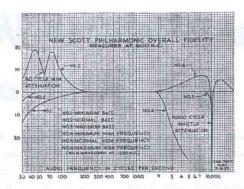
Selectivity Variable From 2 to 16 Kc.

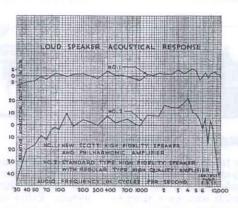
The Selectivity is continuously variable from 2 to 16 Kc., and a special circuit is incorporated which secures maximum sensitivity when the receiver is in the maximum selective position, making it possible to receive weak distant stations at a good volume, without interference on channels adjacent to powerful locals. The ability of a Scott receiver to bring in clearly and with good loud speaker volume, distant stations from the far off parts of the world, is responsible for the large number that have een supplied to Consulates and Embassies in foreign countries, who use them primarily to receive the programs transmitted from the stations in their native countries.

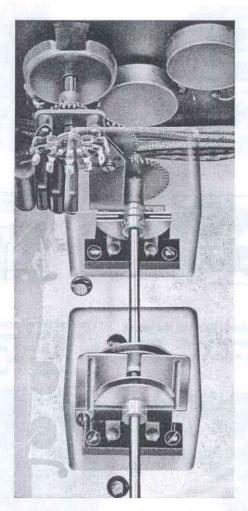
Perfected Program Volume Range Expansion System

When you listen to a symphony broadcast or phonograph record in which there is a very wide dynamic volume range, it is seldom heard *exactly* as you would hear it if









Section of Selectivity-Fidelity Control
Mechanism.

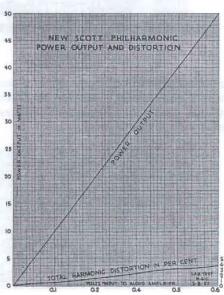
you were to listen to the actual orchestra in the Auditorium or recording studio, because a monitoring engineer increases the very soft passages in order to overcome line noise or tube hiss, and decreases the volume on the very loud passages to avoid distortion or overloading of the transmitter or overcutting of the record grooves. To restore this dynamic volume range to both programs heard over the air or to phonograph records, a special Push Pull Program Volume Range Expander, which is continuously variable, and has a range of 15 db., is incorporated in the SCOTT PHILHAR-MONIC. This means, that combined with the great reserve power available in the audio amplifier system of the SCOTT PHILHARMONIC, it is possible to listen to all types of musical programs at practically the original dynamic volume. A visible indicator on the instrument panel shows exactly at all times the amount of expansion being used.

Scratch Suppressor Eliminates Surface Noise on Phonograph Records

One of the newest developments in the Scott Research Laboratory (patents applied for) is the Scott Scratch Suppressor which eliminates the objectionable surface noise and needle scratch on phonograph records at low volume, without affecting the reproduction of the higher frequencies at normal, or high volumes. This at last makes possible phonograph record reproduction with all of the life and vividness of the original, but with practically every suggestion of mechanical reproduction removed.

Guaranteed for Five Years

Every part of the SCOTT PHILHAR-MONIC receiver is fully guaranteed for five years against defects in either material or workmanship, and will be replaced free of charge when returned to the laboratories providing chassis seals are not broken or the receiver tampered with.



Page Seven

In The Finer Homes Throughout The World You Find a Scott

A good yardstick of any articles's merit is a list of those who have purchased it for their personal use. While no definite statistics are available, it is generally conceded that the Scott Laboratories build the greatest percentage of all fine radio receivers bought in America.



Governmental and Diplomatic Service

Ambassadors and Ministers use Scott Receivers to enable them to keep in constant touch with programs transmitted from their own countries and other countries. The partial list below includes some of the world's most prominent statesmen and government officials who use a Scott to receive programs direct from the transmitting stations of their native land.

CHARLES ALPHAUD, French Ambassador, SWITZERLAND
J. MANUEL DE ANGSTEGUE, Minister of Spain, NORWAY
BERNARDO ATTOLICO, Italian Ambassador, GERMANY
PRINCE OTTO VON EISMARCK, German Ambassador, ENGLAND
A. A. BOLLINI, Agentine Consul General, NEW YORK
THOMBE BREWN, Argentine Ambassador, FRANCE
J. THE PRESIDENT OF CZECHOSLOVAKIA
E. HAUENSCHIELD, Minister of Greece, CZECHOSLOVAKIA
E. HAUENSCHIELD, Minister of Austria, ROUMANIA
F. B. HOWARD, American Minister, PARAGUAY
TRIE SULTAN OF JOHORE, FEDERATED MALAY STATES
THE PRESIDENT, LIBANAISE REPUBLIC
VOJTECH MASTNY, Minister of Czechoslovakia, GERMANY
B. F. MEDINA, Minister of Czechoslovakia, GERMANY
M. K. MOORHEAD, American Consul General, TURKEY
CASTILLIO NAJERA, Mexican Ambassador, FRANCE
HNRY NORWEB, American Minister, BOLLVIA
LEFFEVRE d'ORMESSON, French Ambassador, FRANCE
HANNA BOF RAMPUR, INDIA
BARON ROBERT DE ROTHSCHILD, FRANCE
A. W. WEDDELL, American Ambassador, ARGENTINA
CHARLES S, WILSON, American Minister, JUGOSLAVIA



Society

The Scott owner files contain the names of hundreds listed in the worldfamous "Social Register," official record of American society. Many of these owners have unique built-in installations which are probably the finest of their kind in the world.

CINCIT KING IN THE WORLD.

Mes. J. OGDEN ARMOUR, CHICAGO, Illinois Mr. and Mrs. CHARLES F. BALLEY, LOS ANGELES. California Mr. and Mrs. CHARLES F. BALLEY, LOS ANGELES. California Mr. and Mrs. BOYN, BISHOP, SAN FRANCISCO, California Mr. and Mrs. BOYN, BISHOP, SAN FRANCISCO, California Mr. and Mrs. ROYN, BOSHOP, SAN FRANCISCO, California Mr. and Mrs. HENRY B. CABOT, BOSTON, Massachusetts Mr. and Mrs. HENRY B. CABOT, BOSTON, Massachusetts Mr. and Mrs. PHILIP JAYNE CHAPMAN, PHILADELPHIA, Pennsylvania Mr. and Mrs. FENT S. CLOW, LAKE FOREST, Illinois Miss JOSEPHINE C. COBB. ST. LOUIS, Missouri Mr. and Mrs. WILLIAM HOWARD COX, CINCINNATI, Ohio Mr. and Mrs. WILLIAM HOWARD COX, CINCINNATI, Ohio Mr. and Mrs. J. MALCOLM FORESS, CAMBRIDGE, Massachusetts Mr. and Mrs. J. MALCOLM FORESS, CAMBRIDGE, Massachusetts Mr. and Mrs. O'DONNELL ISELIN, NEW YORK, New York Mr. and Mrs. EUGENE W. KETTERING, DAYTON, Ohio Mrs. WILLIAM KEYSER, BALITIMORE, Maryland Mr. and Mrs. EUGENE W. KETTERING, DAYTON, Ohio Mrs. WILLIAM KEYSER, BALITIMORE, Maryland Mrs. EUGENE W. MISLL, SEA SLAND, Georgia Mr. and Mrs. EUGENE O'NEILL SEA SLAND, Georgia Mr. and Mrs. HONORE PAIMER, SARASOTA, Florida Mr. and Mrs. HONORE PAIMER, SARASOTA, Florida Mr. and Mrs. HONORE RAIMER, SARASOTA, Florida Mr. and Mrs. HONORE PAIMER, SARASOTA, Florida Mrs. MARY ROBERTS RINEHART, NEW YORK, New York Mr. and Mrs. GEORGE R, VANDERBILT, SANDS POINT, New York

A complete file of the distinguished men and women who own these custom instruments would occupy many pages of this size, but the brief listings which follow will convey some idea of how universally Scott receivers are accepted as the finest radio receiving equipment available.



Finance

The leading banks and trust companies of the United States are located in the twenty-five largest cities, and in ninety per cent of these areas you will find that one or more officers of the largest banks are Scott owners. Below are a few of the nation's greatest financial institutions which are directed by Scott owners.

NEW YORK, H. J. Walker, Director, Chase National Bank CHICAGO, F. M. Gordon, Director, First National Bank DETROIT. James McEvoy, Director, National Bank of Detroit LOS ANGELES, Harry J. Bance, Director, California Bank CLEVELAND, E. S. BURKE, Jr., Chairman, Federal Reserve Bank ST. LOUIS, James E. Taussig, Director, First National Bank BALTIMORE, J. L. Whitehurst, Director, Union Trust Company BOSTON, Abbot Stevens, Director, First National Bank PITTSBURGH, Lewis A. Park, Union Trust Company MLWAUKEE, A. C. Elser, Director, First Wisconsin National Bank PITTSBURGH, Lewis A. Park, Union Trust Company MLWAUKEE, A. C. Elser, Director, First Wisconsin National Bank BUFFALO, P. A. Schoellkoof, Director, Manufacturers & Traders Trust WASHINGTON, G. W. Hutchison, Advisory Board, Riggs National Bank GINCENNATI, H. S. Leyman, Chairman, First National Bank GINCENNATI, H. Clark, Director, Genesee Valley Trust Company HOUSTON, J. W. Rockwell, Director, National Bank of Commerce TOLEDO, George R. Ford, Director, First National Bank ST. PAUL, R. M. Weyerhauser, Director, First National Bank BIRMINGHAM, R. I. Ingalls, Director, First National Bank ATLANTA, Robert L. Cooney, Director, First National Bank OMAHA, I. W. Carpenter, Director, Central National Bank BICHMOND, C. D. Larus, Director, Central National Bank



Education

The register of Scott owners who have won wide recognition in the field of education is large. These well-known educators are accepted as probably the highest authorities in their respective fields, and many have won distinguished awards for notable achievements. A few of these Scott owners are below:

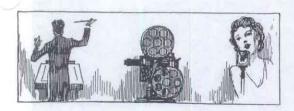
UNIVERSITY OF ARIZONA, L. D. Darrow, Head of Department of Mechanics UNIVERSITY OF ARIZONA, L. D. Darrow, Head of Department of Mechanics UNIVERSITY OF CALIFORNIA, J. Neyland, Member Board of Trustees UNIVERSITY OF CHICAGO, A. Taylor, Chairman, Department of German Literature HARVARD UNIVERSITY, E. C. Robbins, Professor of Industrial Management UNIVERSITY OF ILLINOIS, Oscar G. Mayer, Member Board of Trustees INDIANA UNIVERSITY, John M. Hill, Professor of Spanish LOUISIANA STATE UNIVERSITY, Henry V. Howe, Director, School of Geology UNIVERSITY OF MARYLAND, W. Mackinzie Stevens, Head of Department of Marketing UNIVERSITY OF MINNESOTA, W. R. Appleby, Dean, School of Mines UNIVERSITY OF MINNESOTA, W. R. Appleby, Dean, School of Mines UNIVERSITY OF MINNESOTA, W. R. Appleby, Dean, School of Mines UNIVERSITY OF NEW HAMPSHIRE, W. C. O'Kane, Professor of Economical Entom NEW YORK UNIVERSITY, H. B. Rathbone, Chairman, Department of Journalism NORTHWESTERN UNIVERSITY, R. W. Campbell, Member Board of Trustees UNIVERSITY OF NOTRE, DAME, F. E. Hering, Member Board of Trustees UNIVERSITY OF PENNSYLVANIA, J. Shohat, Professor Ott-Laryngology UNIVERSITY OF PENNSYLVANIA, J. Shohat, Professor Ott-Laryngology UNIVERSITY OF SOUTHERN CALIFORNIA, Department, Music Appreciation STANFORD UNIVERSITY, Welton J. Crook, Professor of Mathematics PRINCETON UNIVERSITY, Welton J. Crook, Professor of Metallurgy UNIVERSITY OF WYOMING, Arthur G. Crane, President



Industry

The list of Scott owners who are prominent in business represents a arge cross-section of American industrial leaders-Chairmen of Boards, residents, or Directors of over 200 huge organizations whose securiies are listed on the New York Stock or Curb Exchanges. Nearly 1 out f every 5 "Big Board" companies are directed by Scott owners. A few re listed below:

RMOUR AND COMPANY, Philip D. Armour, Director ORG-WARNER CORPORATION, George W. Borg, Chairman of Board ATERPILLAR TRACTOR COMPANY, C. P. Holt, Vice-President and Director HAMPION PAPER AND FIBRE COMPANY, Alexander Thomson, Chairman of Board ATERPILLAR TRACTOR COMPANY, C. P. Holf, Vice-President and Director HAMPION PAPER AND FIBRE COMPANY, Alexander Thomson, Chairman of Board OCA-COLA COMPANY, Winship Nunnally, Director RANE COMPANY, Charles B. Nolte, President and Director URTISS-WRIGHT CORPORATION, Thomas A, Morgan, Chairman of Board ASTMAN KODAK COMPANY, William G. Stuber, Chairman of Board ATON MANUFACTICRING COMPANY, J. O. Eaton, Chairman of Board ATON MANUFACTICRING COMPANY, J. O. Eaton, Chairman of Board NDICOTT-JOHNSON CORPORATION, George W. Johnson, President and Director ORD MOTOR COMPANY, Honey Ford, Chairman of Board ENERAL MOTORS CORPORATION, C. F. Ketterling, Vice-President and Director OODYEAR TIRE AND RUBBER COMPANY, C. A. Stillman, Vice-President REAT ATLANTIC AND PACIFIC TEA COMPANY, G. L. Hartford, Chairman of Board LAND STEEL COMPANY, Edward L. Ryetson, Vice-Chairman of Board JUENTAL STATIONAL HARVESTER COMPANY, F. McCormick, Vice-President and Director URRAY CORPORATION OF AMERICA, C. W. Avery, Chairman of Board ATIONAL LEAD COMPANY, Frank M. Carter, President and Director SW YORK CENTRAL RALEROAD, William K. Vanderbilt, Director SW YORK CENTRAL RALEROAD, William K. Vanderbilt, Director SW YORK CENTRAL RALEROAD, William K. Vanderbilt, Director CANG, CHAIFMANT & COMPANY, A. W. Steudel, Vice-President and Director ANG, CHAIFMANT & COMPANY, A. W. Steudel, Vice-President and Director Language Company, C. J. Barkdull, Vice-President and Director LANGER OF ACTION, John J. Mitchell, Director JUNGSTOWN SHEET AND TUBE COMPANY, Frank Purnell, President and Director JUNGSTOWN SHEET AND TUBE COMPANY, Frank Purnell, President and Director JUNGSTOWN SHEET AND TUBE COMPANY, Frank Purnell, President and Director JUNGSTOWN SHEET AND TUBE COMPANY, Frank Purnell, President and Director JUNGSTOWN SHEET AND TUBE COMPANY, Frank Purnell, President and Director JUNGSTOWN SHEET AND TUBE COMPANY, Frank Purnell, President and Director JUNGSTOWN SHEET AND TUBE COMPANY, Frank Purnell, President and Director JUNGSTOWN SHEET AND TUBE COMPANY, Frank Purnell,



Music, Screen and Radio

believe you will agree that those who are accustomed to the finest in usic, as well as those working with elaborate and expensive sound-onm equipment, would not be buying Scott Receivers for their personal tertainment at home if anything better were available. The list of ott owners below includes some of the most outstanding figures in

JOHN ARNOLD, Board Member, Academy of Mction Picture Aris and Sciences Barney Balanery Palaban, President, Paramount Pictures, Inc.

JOHN BARRYMORE, Actor, Mctro-Goldsyn-Mayer
CHARLES F, BENTER, Leader, United States Navy Band
EDDIE CANTOR, Actor, United Artista Corporation
MACK GORDON, Composer, Gordon and Revell
JAMES W. HORNE, Former Director, Hal Rosel Studios, Inc.
MERRITH HULBURD, Production Executive, Samuel Goldwyn, Inc.
AL JOLSON, Actor, First National Films
GUNTHER KRAMPF, Director, Gaumont British Picture Corporation
MERVYN LE ROY, Producer, Warner Brothers Pictures, Inc.
GUY LOMBARDO, Lender, Royal Canadian Orrelestra
VICTOR MILNER, President, American Society of Cinematographers
JOHN FRANCIS NEYLAN, Director, San Francisco Opera Association
GENNARO PAPI, Director, Mctropolitan Opera Company of New York
LEONARD F, PLUGGE, President, International Broadcasting Corporation
HARADEN PRATT, Vice-President, McKay Radio and Telegraph Company
CLIFF REID, Producer, RKO Radio Pictures, Inc.

Targo R. GROBINSON, Member Board of Directors, Screen Actors Guild, Inc.

R SCHERTZINGER, Musical Director, Columbia Pictures, Inc.
O SERAFIN, Director, Royal Opera of Rome, Italy

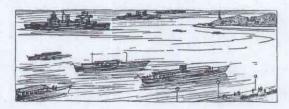
LLOYO SHELLON, Producer, Selvance International Pictures, Inc.
GRADWELL L. SEARS, Vice-President, Vitagraph Corporation
JULES STEIN, President, Music Corporation of America
ARTURO TOSCANINI, Conductor, New York Philharmonic Orchestra
RUDY VALLEE, Leader, Connecticut Yankees
JACK L. WARNER, Vice-President, Twentieth Century-Fox Film Corp.



Science and Engineering

The importance of many Scott owners in their respective fields of science is apparent from the fact that most of them are registered in "Who's Who in America," and many have, at one time or another, been elected by their colleagues to the highest offices in nationally famous scientific and engineering societies. A few of these Scott purchasers are listed below:

LAWRENCE ADDICKS, Former President, Electrochemical Society
HAROLD L. ALLING, Former Vice-President, Mineralogical Society of America
COMMANDER E. D. ALMY, Director, United States Naval Research Laboratories
MAJOR EDWIN H. ARMSTRONG, Former Director, Institute of Radio Engineers
LEO H. BAEKELAND, Former President, American Institute of Chemical Engineers
FREDERICK BEDPELL, Former Vice-President, American Institute of Electrical Engineers
LYMAN J. BRIGGS, Member Board of Directors, American Standards Association FREDERICK BEDELL, Former Vice-President, American Institute of Electrical Engineers LYMAN J BRIGGS, Member Board of Directors, American Standards Association HERMAN BUNDESON, Former President, American Public Health Association ROBERT S. CATHCART, State Chairman, American Society for the Control of Cancer A. W. CRANE, Former President, American Roenigen Ray Society JAMES FRANCIS COOKE, Director, Franco-American Institute of Science ANDREW W. CRUSE, Assistant Chief Engineer, Federal Communications Commission WATSON DAVIS, Member of Council, History of Science Society H. EAVENSON, Former President, American Institute Mining and Metallurgical Engineers CURTIS A. EVANS, Former Member Board of Governors, American College of Surgeons L. M. GOULD, Fellow, Geological Society of America W. K. HATT, Former President, Industrial Engineering Society ELMER T. HOWSON, Former President, Western Society of Engineers EDWARD V. HUNTINGTON, Former Chairman, American Academy of Arts and Sciences JAMES McEVOV, President, General Motors Research Corporation JAMES McLESTER, Former President, American College of Radiology W. C. O'KANE, Former President, American Association of Economic Entomologists W. A. PUSEY, Former President, American Association of Economic Entomologists RALPH C. TEETOR, President, American Dermatological Association RALFRED K. STERN, President, American Dermatological Association SCIENCE, American Methematical Society OSWALD VEBLEN, Former President, American Therapeutic Society OSWALD VEBLEN, Former President, American Therapeutic Society OSWALD VEBLEN, Former President, American Sciences Institute for Phychonnalysis RALPH C. TEETOR, President, American Society of Automotive Engineers



Yachts and U.S. Battleships

One of the most difficult types of radio installations to make is on ocean liners, yachts, and battleships. All modern boats have a large number of motors which, unless filtered and kept in perfect condition, create considerable interference. Added to this is the fact that ships are fabricated principally from steel, and the mass of metal absorbs a large part of all radio signals, making it necessary to employ a receiver that is extremely sensitive. Also, every part of the receiver must be protected against moisture, as the salt air plays havoc with any part not scientifically impregnated. Scott Receivers are now providing good reception on the following U. S. Battleships:

U. S. S. LOUISVILLE U. S. S. IDAHO U. S. S. OKLAHOMA U. S. S. SARATOGA

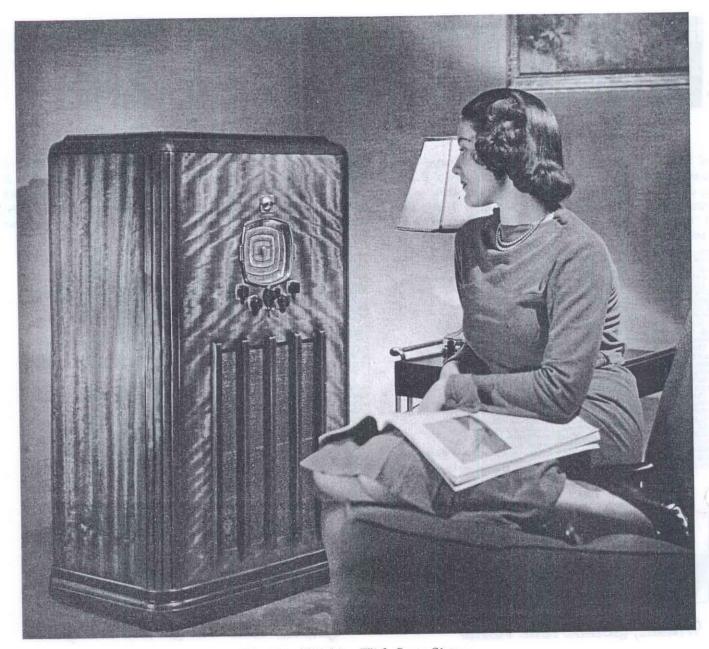
U. S. S. CALIFORNIA U. S. S. HENDERSON U. S. S. NEVADA U. S. S. LEXINGTON

A good example of the kind of reception obtained on ocean liners is expressed in the following report:
"In the after corner of my office, I have the master Gyro compass with its

commutators and two sets of trolleys, each making and breaking contact 60 times a minute, all the electrical blowers throughout the ship for mechanical ventilation to cargo holds, one in the shelter deck 15 feet directly under the Scott—still I am free of all noises in the receiver. There are six radios aboard of different makes, and the Scott is the ONLY one that gets reception you can sit down and listen to."—R. A. Oliver, S. S. Virginian.

Scott Receivers are also installed on many of the most luxurious yachts afloat, among them:

OWNER
CARL TUCKER
W. L. MELLON
ROBERT JEFFCOTT
MRS. JOHN J. WHITE, SR.
D. F. WHEELER
WILLIAM T. WALKER
FRED MANDEL



The New Wilshire With Scott Sixteen

THE SCOTT SIXTEEN

A PRECISION BUILT 16 TUBE RECEIVER THAT COMBINES HIGH FIDELITY REPRODUCTION WITH SENSATIONAL LONG DISTANCE PERFORMANCE

The SCOTT SIXTEEN has been designed for those desiring a smaller and more compact receiver than the PHILHARMONIC, which will give maximum performance on all of the regular foreign short wave, police and broadcast bands, with superior High Fidelity reproduction. It is built by the same skilled technicians who build the SCOTT PHILHARMONIC, from the highest quality parts, and carries the same Five Year Guarantee, and represents one of the most efficient radio receivers ever to come from our Research Laboratory.

Wave Lengths Covered

Four wave bands cover all foreign and domestic stations from 13.6 meters (22 megs.) to 546 meters (550 Kc.). This is a much wider wave length range than that covered by the ordinary radio receiver, in that it includes on wave bands No. 1 and No. 2, the very interesting 13 meter band in addition to the regular 16, 19, 25, 31 and 49 meter bands. Wave band No. 3 covers the very interesting air and police stations, while band No. 4 covers the stations on the regular broadcast band.

Tubes Used in Scott Sixteen

Sixteen of the latest type octol base tubes are used, two of them double purpose, and one of them triple purpose, giving performance equal to 20 tubes of the ordinary type.

The High Fidelity Range

The High Fidelity range of the SCO1 SIXTEEN is approximately 50% greater than that of the ordinary receiver, as shown by the Fidelity curve reproduced on the following page.

In order to secure the finest possible reproduction, either from broadcasts over the air, or from phonograph records, separate variable controls are provided for bass and treble. The treble control is especially valable when listening to music in which the tring instruments predominate. By increasing the Treble Control you are able to build up or amplify the higher tones or overtones, so that you can hear them with their original brilliance and clarity.

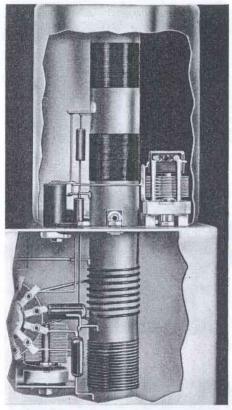
If the lower or bass tones are not reproduced properly, musical selections lack richness and depth. In order to get the best possible bass reproduction on every type of selection, an independent, continuously variable, Bass Control is provided which enables the bass response to be set exactly where

it is most pleasing to the ear. On some broadcasts artists may stand

too near the microphone or some of the instruments in the orchestra, particularly the bass viol or saxophone, may be placed too near to the microphone which makes the bass reproduction too boomy. In these cases, you are able to reduce the bass response until you restore the tonal balance. The richness and purity of tone of both the bass and treble tones will prove a constant source of enjoyment to those who appreciate full and natural High Fidelity reproduction.

Tone Balanced Volume Control

Incorporated in the SCOTT SIXTEEN is the same type of perfect tone-balanced



The Oscillator System of the Scott

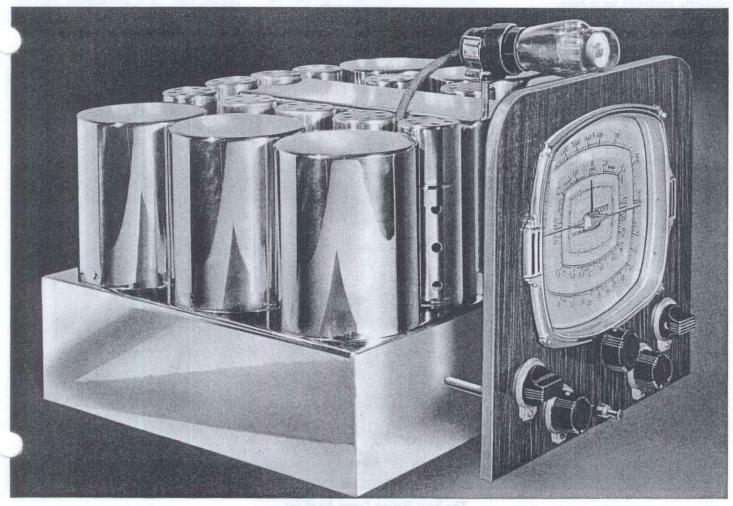
Volume Control as that incorporated in the SCOTT PHILHARMONIC. On the ordinary type of radio receiver, when the volume is turned down, the very low and the very high tones become practically inaudible, leaving only the tones in the middle register that can be heard clearly. In the SCOTT SIXTEEN, as you turn down the volume, you find both the lower and the higher tones come thru in perfect balance with the tones of the middle register.

Three Stages of Audio Amplification

Three stages of audio amplification are provided, which gives an undistorted output of 13½ watts, and approximately 16 watts peak power output. The first audio stage acts as a balancing Phase Inverter which converts the signal to push pull to give distortionless amplification. Following the Phase Inverter is the second stage of audio amplification which operates into the balanced primary of a special driver circuit, which uses two of the new 6V6G beam power output tubes. Incorporated in the power output stage is a special Inverse Feed-Back system which prevents raspy. strident reproduction, and automatically maintains a practically flat acoustical response over a wide audio frequency range.

Latest Type High Fidelity Loud Speaker Used in Scott Sixteen

The High Fidelity speaker used in the



The Scott Sixteen Tuning Chassis

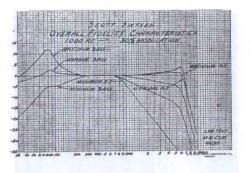
SCOTT SIXTEEN was especially developed for it and uses two cones (1) a 12" curvilinear cone and (2) a special exponential High Frequency cone which acts as a resonator and diffuser, providing perfect distribution of the higher frequencies to all parts of the room.

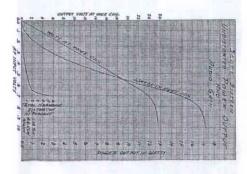
Scott Super Shield Antenna Coupling System Provides Quieter Foreign Reception

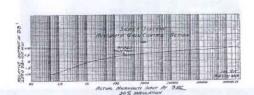
Built into the SCOTT SIXTEEN is the exclusive SCOTT Supershield Noise Reducing Antenna Coupling System recently developed in our research laboratories, (Scott Patents Applied For) which not only eliminates practically all noise and electrical interference picked up on the antenna lead-in, but at the same time, effectively increases the sensitivity and distance getting ability of the receiver approximately 100%.

This feature is particularly valuable in locations such as apartments or hotels or locations which have a high degree of local interference.

In the ordinary receiver a large part of this interference is picked up on the antenna lead-in, and is so bad that it often makes foreign short wave reception practically impossible. In such locations as this, if the flat top of the antenna can be erected to a suitable height, satisfactory reception can be secured in locations where the foreign short wave programs previously have been completely swallowed up in noise.







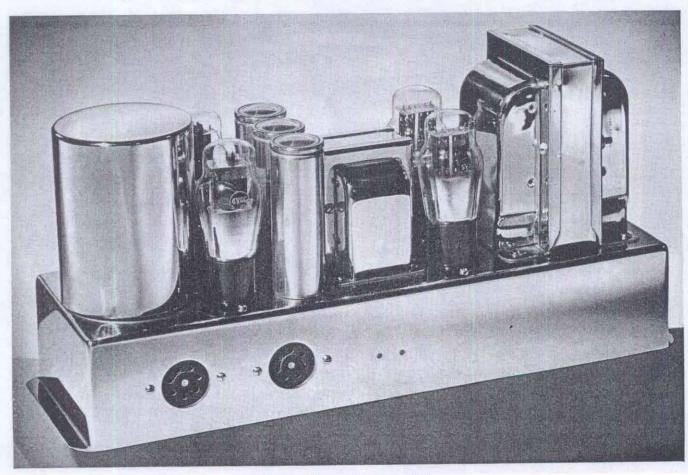
In addition to the Supershield Antenna Coupling System, a suppressor is used in the grid circuit of the r.f. tube on all wave bands to eliminate tube hiss, and is another of the reasons for the extremely clear and quiet reception of foreign stations on all wave bands.

Two Separate Automatic Volume Control Systems Used

In order to provide the quietest and steadiest possible signal from foreign short wave stations, two separate automatic volume control systems are used in the SCOTT SIXTEEN, to control both the r.f. and i.f. amplifiers. This system has two important advantages over the customary single system used in the ordinary radio receiver. First, it maintains signals from distant stations that are continuously increasing and decreasing in signal strength, at a remarkably constant volume, and second, prevents the overloading of the r.f. amplifier by a strong station on a channel adjacent to a weak distant station you may desire to receive, so permitting clear reception of the desired signal without being marred by interference from the stronger station on the adjacent channel.

New Band Passed I. F. Amplifier

One of the outstanding features of the new SCOTT SIXTEEN is its newly developed band passed I.F. amplifier (Scott Patents Applied For). It is permanently adjusted



The Scott Sixteen Power Amplifier.

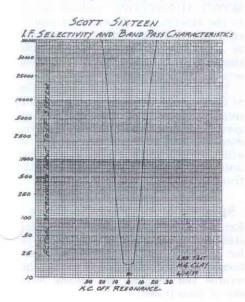
with extreme precision to exactly the correct band width for High Fidelity reception. An examination of the I.F. Selectivity and Band Pass Characteristic curve will show that the electivity is more than adequate for the paration of broadcast stations on adjacent channels, and actually exceeds present day requirements on either the broadcast or short wave bands.

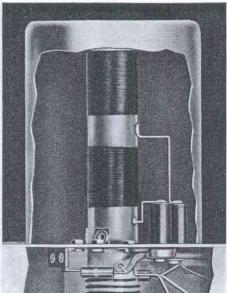
Foreign Station Reception

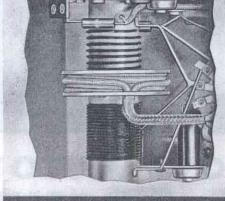
The curves showing the USEABLE Sensitivity of the SCOTT SIXTEEN will quickly show to those familiar with laboratory curves that the Sensitivity of the SCOTT SIXTEEN is unusually high. To bring in foreign stations from great distances clearly; a radio receiver must have a high degree of USEABLE Sensitivity. One of the most outstanding features of the new SCOTT SIXTEEN is the very great clearness and quietness with which distant stations are received. The only kind of programs from foreign stations that are worth listening to, are those that can be brought in so that they are not marred by noise or fading. The Sensitivity of the SCOTT SIXTEEN is so great, that providing atmospheric conditions are not abnormal, you can tune in foreign stations regularly that are quite beyond the receiving range of ordinary receivers. When you hear the programs coming from stations located in London, Berlin, Paris, or Rome, you will often find it extremely difficult to realize you are actually listening to a proam that is coming from a foreign station, o clearly and quietly will the programs be received. This is particularly valuable today when practically all of the major nations are sending out daily news broadcasts giving their views on world affairs.

Silent Tuning Between Stations

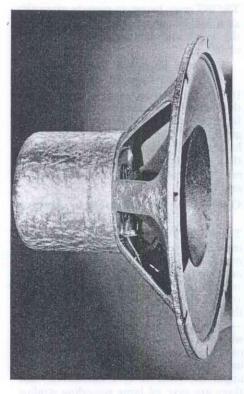
Nothing is more annoying than loud blasts of noise or interference when tuning between stations. In the SCOTT SIXTEEN a special feature is incorporated by which it is possible to receive all of the stations that are coming in free from serious inter-







The Supershield Antenna Coupling System of the Scott Sixteen.



The High Fidelity Scott Sixteen Speaker,

ference, without receiving the usual static and man-made electrical interference, whistles, while you tune from station to station. The quiet tuning system is arranged so that it is automatically adjusted for maximum operation on each of the bands to which the receiver is tuned.

Scott Sixteen Extremely Economical to Operate

So efficient is the design of the SCOTT SIXTEEN that only 135 watts of electricity is required to operate it—less than that consumed by most of the common electrical appliances used in the home.

Guaranteed 5 Years—20 Times as Long as the Average Radio

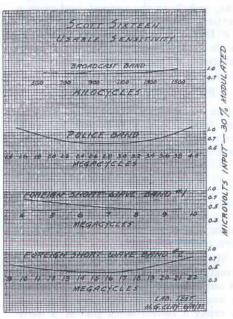
The SCOTT SIXTEEN is guaranteed against all defects (except tubes, which are guaranteed by the tube manufacturer) for FIVE YEARS, instead of the usual 90 day guarantee given with ordinary radios.

30 Day Trial Given—to Prove Superiority

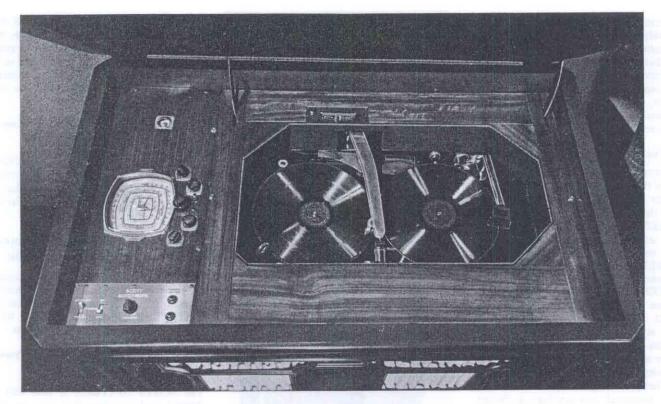
The SCOTT SIXTEEN is sold with the distinct understanding that you are to be allowed 30 full days (U.S.A. only) after delivery, to test it in your home. If it does not outperform any other make of receiver, regardless of price or number of tubes used, you are at liberty to return it any time within the 30 day period and we will promptly refund the purchase price you paid for it.

Liberal Budget Plan

Both the SCOTT SIXTEEN and SCOTT PHILHARMONIC can be purchased on extremely liberal Budget Plan terms if desired. The transaction is strictly private, as you deal directly with the Scott Research Laboratory. Full details of our Liberal Budget Plan will be mailed on request.



Page Thirteen



The SCOTT AUTOTROPE

New 30 Record Changer Equipped with High Fidelity Scott Plays One or Both Sides of Either 10" or 12" Records and Provides Up to

5½ Hours Continuous Entertainment

The new SCOTT-AUTOTROPE—described as "the Rolls Royce of record changers" by Compton Mackenzie in a recent issue of "Gramophone"—is undoubtedly one of the most amazing and complete instruments ever developed for home entertainment.

Simple Push-Button Operation

Merely place your selection of records, from one to thirty, into the record magazine, switch on the current, and press a button—thereafter, the SCOTT-AUTO-TROPE will furnish you with up to as much as $5\frac{1}{2}$ hours of continuous entertainment without further attention on your part.

Plays Both Sides of Record

From a purely mechanical standpoint, the SCOTT-AUTOTROPE is really three types of electrical phonographs combined into a single instrument. FIRST—It may be set to play up to as many as 30 records, either 10" or 12" intermixed in any order desired (60 separate recordings), on both sides so you can enjoy operas, symphonies, concertos, and other album sets of records in their proper sequence.

SECOND—It may be set to play automatically up to as many as 30 records on one side only, with 10" or 12" mixed in any order. If at any time you wish to reject a record being played, a mere

touch of a button is all that is required to pass on to the next selection.

THIRD—The SCOTT-AUTO-TROPE may be set to operate manually as a single record phonograph, that is, the automatic feature may be cut out entirely.

Records Handled More Gently Than Human Hands

It is a fascinating experience to watch this amazing instrument in operation, for it actually handles the records more gently and more carefully than human hands, and operates with such precision that your records are never in the slightest danger of damage, or scratching at any time.

Operation Not Limited to Only a Few Kinds of Records

The SCOTT-AUTOTROPE is the only instrument of its kind which will play a number of records automatically, in practically any condition. Records that are quite badly warped or chipped around the edges, or that are unusually thick or comparatively thin, are played—even when intermixed at random—with the same perfection as commercial recordings of standard thickness. The importance of this feature is instantly apparent when it is remembered that there are over 40 large recording studios in existence and that their records are not all exactly the same thickness. An

automatic record changer that can handle only the "standard" makes often seriously limits your selection of the most desirable recording of any given composition.

97% Perfect Tracking

Another factor contributing to the safety and preservation of your records is that the tone arm of the SCOTT-AUTO-TROPE has 97% perfect tracking anywhere on the record. This simply means that you can play your records on the SCOTT-AUTOTROPE without injury to the grooves, which would be practically ruined if played the same number of times on straight arm automatic changers which often have a tracking error of 30% or more.

To the best of our knowledge, the SCOTT-AUTOTROPE is the ONLY record changer that does not rely on gravity in any stage of its operation and does not have to be set level before it will operate, which makes it an ideal instrument especially for yacht installations.

Remote Control with Extra Speakers in Any Room in Home

Extra speakers can be furnished for installation in any room in your home, or for outdoors, and remote control positions which will allow you to change the records and regulate the volume from any of these points.

THE SECRET OF SCOTT PERFORMANCE

Those who own or are familiar with Scott receivers, frequently ask why they are so nsistently superior in performance, and why their design for many years has been so advanced as compared to the ordinary type of radio. One reason for this superiority is that they are built to order in small numbers by very highly skilled technicians, with resulting workmanship of a much higher class than is possible where receivers are turned out by high speed mass production methods in numbers which frequently exceed 10,000 per day in the factory of a single manufacturer.

While a comprehensive analysis of all of the factors which contribute toward a Scott receiver's superiority would fill many volumes, it will undoubtedly be interesting to

the radio enthusiast and engineer to learn the guiding principles which have been largely responsible for making the name SCOTT so well and favorably known throughout the world.

In a SCOTT receiver every single feature is brought to the highest possible degree of efficiency. Often the individual gains secured in a circuit, when considered individually, may appear so small as to be not worth serious consideration, but it is when all of these gains in efficiency are multiplied together, that the value of the guiding inciple and ideals always be-

inciple and ideals always bere us when designing a SCOTT receiver is appreciated, for it is this perfection of every circuit and detail that is responsible for the difference in performance between the ordinary radio receiver and a SCOTT, and is

probably the greatest contributing factor to the universal recognition throughout the world of SCOTT leadership in radio receiver design.

In order to understand just how the performance of a SCOTT receiver is developed to such a high standard, we will start with the very feeble signal received from a distant broadcast station, and follow its course after it is received by the Scott Super Antenna, and in this way see some of the engineering refinements and details in a SCOTT compared with other receivers.

In the case of a SCOTT receiver, this very weak signal is picked up in one pair or in a combination of pairs of the antenna di-poles, and travels along approximately 100 feet of special high grade twisted lead-in wire made exclusively to our specifications. The heavy, well spaced, conductors of the lead-in wire consist of many strands of fine, rubber covered copper wire, twisted together and covered with the finest grade of Para Marine rubber. Exhaustive tests show that the use of the usual type ' lead-in wire used, is less than 80% as

icient as that used in the Scott lead-in, and represents a loss of approximately 2 db., as compared to the special Scott lead-in.

The short wave antenna primary of the SCOTT receiver is exactly matched to the 125 ohm surge impedance of the Scott an-

tenna lead-in with which it is designed to operate, resulting in zero reflection loss at this point. However, other receivers, in an attempt to provide a satisfactory compromise for both single wire and transmission line operation, provide a short wave primary input impedance of 400 to 1,000 ohms, resulting in a reflection loss at this point of between 1.5 and 3.5 db.

Pure magnetic coupling is employed between the shielded short wave primary and the corresponding tuned secondary inductor in order to avoid the result of the usual interference inherent in complex coupling. The design of this high "Q" secondary inductor is the result of an exhaustive study of over 150 different coil combinations, coil diameters, wire size, pitch and winding

The use of special non-inductive type high frequency by-pass condensers in the tuned circuits associated with the R.F. tube, and the use of a coincidental grounding system for the high frequency inductor, tuning condenser, cathode and screen tube elements, results in a further signal voltage economy of approximately .3 db. as compared to other receivers.

Obviously, it is impossible to give a detailed analysis of all of the many factors (each of which has been studied exhaustively in the Scott Research Laboratory) throughout the many additional functions of the receiver, which contribute to the great sensitivity and remarkable signal to noise ratio attained in Scott receivers. However, a tabulation summarizing the

decibel gains of the efficiency factors of the various elements involved in a SCOTT receiver as compared with the ordinary type of receiver, from the antenna to the frequency converter tube, is given on the chart shown on this page.

This tabulation is based on the engineering fact, that the overall efficiency of any amplifying system is the resultant of the product of each and every individual efficiency rating of every circuit element handling the signal, and strikingly demonstrates the fact, that while the effect of any one of the individual factors is small considered by itself, the resultant of all these factors, for only the antenna system and the two tuned radio frequency circuits, shows the improvement in gain and signal efficiency of the Scott system over the ordinary type of radio, of approximately 4.84 to 1 or 13.7 db.

Naturally the increased cost of the individual circuit elements appears on the surface to be out of proportion to the small improvements in receiver performance, when each gain is considered individually, and is the reason why they are generally disregarded in the designing of the ordinary production type of radio receivers because of the lower cost secured by substituting appreciably less expensive elements in the receiver.

Another factor that adds considerably to the overall efficiency of a Scott receiver, is the unusual advantages gained in the arrangement of parts, because of the fact that the power supply and power amplifier are always built on a separate base which is installed some distance from the receiver proper, thus avoiding crowding and displacing critical circuit elements.

From time to time, as space permits in succeeding issues of the News, a similar analysis will be made of the other circuits in our receiver as compared with those used in the ordinary type of receiver, to show those interested in the finer engineering details, why Scott receivers have attained, and have continued to hold for many years, the same position in the radio world that Rolls Royce holds in the automobile world.

TABULATION OF EFFICIENCY FACTORS IN SCOTT RECEIVERS

Circuit Element	Efficiency of Other Systems Compared to Scott Taken as 1.00	Scott Efficiency Factor (Reciprocal of previous column)	D. B. Increment Improvement of Scott Over Other Systems
Antenna Wire	0.976	1.024	0.2
Impedance Match at Antenna		1.035	0.3
Lead-in	0.794	1.260	2.0
Lead-in to Primary Match	. 0.841	1.189	1.5
Antenna Switch	0.989	1.011	0.1
Coil Shield	0.943	1.060	0.5
Air Trimming Condenser	0.933	1.072	0.6
Secondary Switch	0.955	1.047	0.4
Celanese & Bare Wiring	0.976	1.024	0.2
Concentration of Inductance	0.989	1.011	0.1
Ratio of Inductance to Capacity	0.667	1.498	3.5
By-pass and Ground System	0.986	1.035	0.3
All elements in 2nd R. F. Stage	0.631	1.585	4.0
Product of all Factors	0.206	4.84	13.7 D. B.
	or	or	Sum of D. B.
(Antenna to Converter) , ,	20.6%	484%	Increments

length, and shield can size. A decrease from the 3½" diameter shield can used in both the SCOTT PHILHARMONIC and the SCOTT SIXTEEN to the usual 2" diameter generally used in ordinary receivers, would result in a decrease in the effective "Q" in the coil of 5.5% or .5 db.

Special Scott low power factor air condensers give a gain of .6 db. over the mica trimmer condensers generally used in this circuit in the ordinary radio receiver. The use of the standard impregnated fabric insulation on high frequency "hook-up" wire, instead of the use of the uncolored celanese insulation which is used in the SCOTT, would result in a further loss of .2 db.

In SCOTT receivers, the effective tuned circuit resistance is kept to an absolute minimum by the use of every known principle of low loss circuit construction, and the inductive reactance is maximized on every frequency band by the use of a tuning condenser having a remarkably low maximum capacity, especially designed to our specifications. For example, in the case of the SCOTT SIXTEEN receiver, the total maximum capacity is held under 250 mmfd. The significance of this is realized when it is compared to other allwave receivers employing tuned circuits which have maximum capacities in excess of 450 mmfd. resulting in a loss of approximately 3.5 db.

The Scott News

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E. H. Scott, Editor

It's What Is Inside the Console that Determines Radio Receiver Performance

Last week I had a most interesting experience. I was in the market for a humifier for my home, and for this purpose visited one of the leading electrical shops in the city of Chicago. While there I had to pass the radio department and noticed on display one or two models of practically every well known make of receiver.



E. H. SCOTT

A great many of the console designs this year are extremely interesting and attractive, so I stopped and looked over some of the higher priced ones, then took the opportunity of glancing around the back to see what type of chassis

and speakers were installed inside. To say that I was surprised at the small amount of actual radio receiving equipment, that is, the chassis and speaker, that was installed inside the large consoles, is putting it mildly.

Apparently, most manufacturers today believe radio receivers are being purchased largely on the appearance of the console, and not particularly on the radio installed inside, at least, that was the only conclusion I could come to when I compared the appearance and size of the console, with the appearance and size, in most cases, of the very small radio chassis installed in them.

It should not be necessary to point out that no matter how beautiful the console of a radio may be, IT IS WHAT'S INSIDE THAT CONSOLE THAT DETERMINES THE QUALITY OF THE PROGRAMS YOU ARE GOING TO HEAR, AND WHETHER YOU WILL BE ABLE

TO BRING IN CLEARLY PROGRAMS FROM FOREIGN STATIONS IN VARIOUS PARTS OF THE WORLD.

A Suggestion

As a result of this visit I would like to make the following suggestion: Before making your final decision about the radio receiver you are going to present yourself with this Christmas, take along the copy of the "Scott News" enclosed. When looking over the various receivers under consideration, and before making any decision, ask the price, then ask to see the radio receiving chassis and speaker inside the console so that you may compare it with the chassis, amplifier and speaker of either the SCOTT PHILHARMONIC or the SCOTT SIXTEEN.

When you make this actual comparison, I am quite certain you will quickly appreciate not only the tremendous difference there is between the ordinary type of radio sold in retail stores, and the beautifully designed built and finished Scott consoles, and the precision built Scott receiver.

The Ideal Place to Judge Radio Performance

I have always insisted that there is only one place to really judge the quality of a radio receiver, and that is in your own home. So sure am I that a Scott receiver is superior in every way —finer Tone—greater Sensitivity—greater Selectivity—and is built with greater Precision and from Higher Quality Parts-and is better IN EVERY WAY, than any other receiver with which it can be compared, that I will accept your order with the distinct understanding you are to be allowed 30 days after delivery anywhere in U.S., in which to make any kind of competitive test for performance, or comparative test for superiority in construction and appearance, against any other radio receiver you may care to test against it during this period.

Our Broad Guarantee

To the best of my knowledge there is no other receiver being sold today with such a broad guarantee. However, I feel not the slightest hesitation in selling you a Scott receiver under such a broad guarantee of performance and satisfaction, for I know beyond all question, that the margin of superiority between a Scott and any other receiver is so great, that there is no question in

my mind about the result when such a comparative test is made.

Why Scott Receivers Are Not Sold in Retail Stores

Many wonder why Scott receivers ar not sold in radio retail stores. The simple facts are that anything that is sold in hundreds of stores must be produced in very large numbers, and a Scott receiver simply cannot be built and sold that way, just as fine custom-made garments are made to individual order and sold direct to the purchaser by the maker. This method of merchandising has many advantages, in the case of a radio receiver, it means that you save the regular distributor's and retailer's profit, which amounts to 50% or more of the price you pay.

Why Scott Receivers Cost Little More Than Ordinary Radios

By buying direct from the Laboratory all extra intermediatory profits are eliminated, enabling me to sell the precision built Scott receiver direct to you at a price that is little, if any, more than the price now being asked for ordinary radio receivers.

In addition to the saving in cost, I believe everyone will agree it is always more satisfactory if it is possible to deal directly with the manufacturer of a product, who, in this way, can take more personal interest in making certain that the customer secures the greatest amount of satisfaction from it. When you buy a Scott receiver I keep in constant touch with you over a period of years, advising you of interesting broadcasts, etc. and at various times giving you other information that will help you to get the maximum amount of satisfaction from your receiver.

I find that this is not only a helpful service to the owner, but a sound business practice, because I have found over a period of years that approximately 80% of the receivers I am selling today are sales made thru the recommendation of those who now own a Scott receiver, and know the kind of performance they will give, not simply for a few months, but for many years.

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THE E. H. SCOTT RADIO LABORATORIES, INC.

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