

# Radio News

January, 1937

## *Britain Inaugurates* **TELEVISION** *for Public Use*

Employing a cathode-ray system, the counterpart of that already developed in America, London is now getting its television programs and television receivers are being purchased and used by the British public with exceptionally fine results. Our readers will be interested in the description of this new service. American radio enthusiasts would like a similar service here.

*By the Television Reporter*

**E**NGLAND is now firing her opening guns in the world race for television supremacy as this issue of RADIO NEWS goes to press! On a grand and stately scale, the British Broadcasting Corporation, the Government radio monopoly, with the cooperation of virtually the entire roster of Great Britain's radio manufacturers, has set the ball of public-participating television a-rolling.

Time alone will tell what country will take television leadership. There are hardly enough participating nations at this time to rate the standings of their respective television industries. The leading American television contenders, for example, claim that they are "more advanced in the laboratory" than any nation in the world. Americans are asking "Why can't our Federal Communications Commission do something to get television stations licensed and in operation here!" Our American public certainly wants television!

### Rare Showmanship

With a flare of showmanship rarely displayed in conservative British industry, television was dramatically introduced to the public at the annual Radio Show at Olympia, London. Now, mind you, the British Olympia show is a solemn and sacred industrial affair. It is the property of the British Radio Manufacturers' Association, who up to this year saw to it that television

was kept a goodly distance from the exhibition hall. Without advance fanfare or ballyhoo, the 1936 show visitors were awed by sight-and-sound merchandise displayed by the nation's leading receiver manufacturers. And England is going definitely television-minded on the same great scale that America went air-minded when Lindbergh made his famous solo hop to Paris.

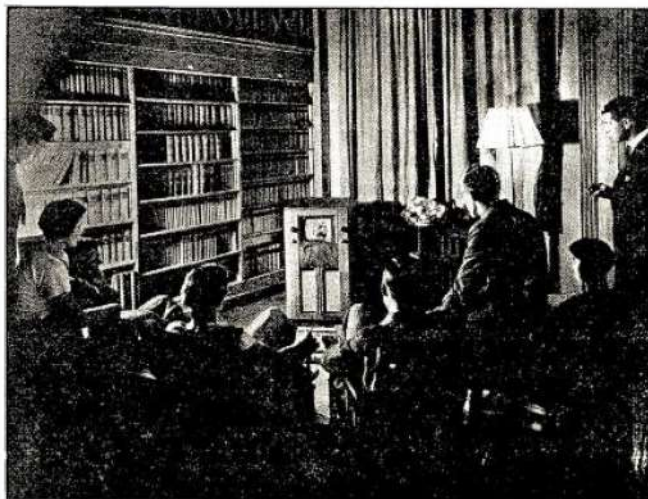
But the British radio industry didn't let television run wild. It is still maintaining a check-rein on its upward surge while it is feeling the pulse of the public on the situation. Dealers as well as the public are receiving gradual doses of instruction as to what it is all about. But step by step, the television *eye* is gaining on the radio *ear*!

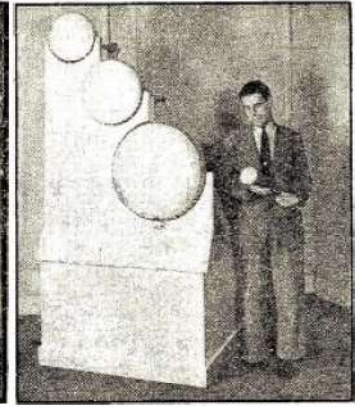
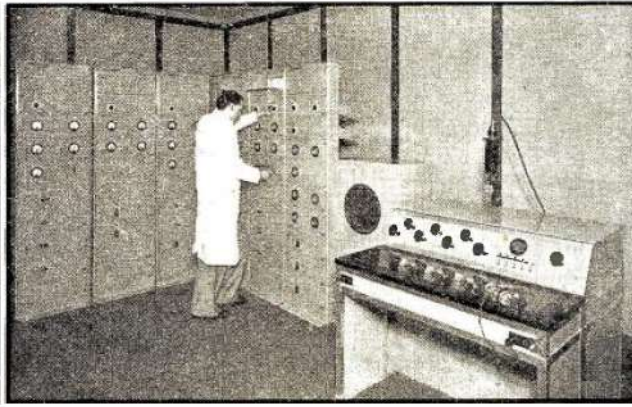
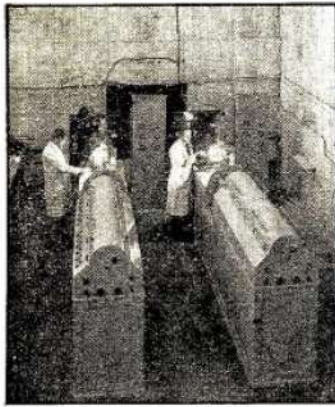
The surprising thing (to the rest of the world) is just how refined a product the British television set really is. As expected, its cost is high. But it contains fewer tubes than the experimental laboratory models demonstrated in the U. S. A.; yields clean, sharp pictures and is an all-wave sound receiver in addition to a vision instrument.

### In English Homes

Television's introduction in London is now under way. The process of acquainting the populace with the new art will reach its climax with the coronation ceremonies of King Edward VIII the coming Spring. All efforts are being made to have

LONDONERS TAKE THEIR TELEVISION SERIOUSLY  
*This photograph in an English home shows a typically British family enjoying a television program on one of the new sets.*





**HIGHLIGHTS OF THE NEW BRITISH EQUIPMENT**

*The two 240-line Telecine scanner in operation for the Alexandra Palace shown at the left. Above: The Baird control desk and amplifiers used. At right: The Baird "cathovisor" cathode-ray tubes, showing the various size screens, in comparison to a small cathode-ray tube held by William Taynton, whose face was the first televised in England in 1926.*

as many English homes as possible equipped with sets to see the ruler's formal acquisition of the throne. It is quite likely that that very day will mark the climax of the launching of a new visual program dynasty in the radio world.

To the date of this writing, no television studio and transmission set-up has approached in perfection of detail that of BBC in the Alexandra Palace from which transmissions are now on the air. Let's see what a tour of the Palace discloses: The television station is on a hill 306 feet above sea level. Nearly all London can be seen from the antenna site—an important point where ultra-short waves are concerned. With the combination of mast and tower height, the summit of the aerial is actually more than 600 feet above sea level. Directly below is a separate antenna for the synchronized sound signals.

**Two Systems Used**

There are alternate transmissions using, respectively, apparatus of the Baird Television Company and the Marconi-E.M.I. Television Company. The installations are separate. The sound transmitting equipment was supplied by Marconi's Wireless Telegraph Company according to specifications of the BBC. Such refinements as dressing rooms for artists, a restaurant, store rooms for scenery and props, and cinema projec-

tion, editing and cutting rooms are also provided.

The transmitters are all on the ground floor. This level also houses the projection theatre, restaurant and scenery productions shop. A large area has been set aside for televising such large objects as motor cars and animals which cannot be brought into the studio. Tackle and hoists for handling scenery can accommodate scenery weighing a ton.

**Outdoor Pickups**

The television camera can travel down a ramp to a concrete "apron" on the terrace for picking up outdoor programs. The main studios are on the upper story.

Marconi-E.M.I. pick-ups are made from a studio 30 by 70 feet in area and 25 feet high. Two stages have been built in this room with equipment for rapid interchanging. A steel lighting bridge runs across the center of the stu-

**DETAILS OF A BRITISH RECEIVER**

*At the lower left is a front view of a television receiver made by the General Electric Company of England, with a screen and loudspeaker centered vertically and the controls for sight and sound at right and left. Below: A schematic representation of the various elements in the receiver from the aerial to the "vision" tube and the loudspeaker. The view at the lower right shows how these elements are placed.*

dio, providing variable illumination for both stages. Adjoining are the production and "tele-cine" rooms housing the production staff and television cameras. Incidentally, the British television cameras are built along virtually the same lines as those of RCA, Philco, Farnsworth, etc., of the U. S. A.

The Baird studio is the counterpart in size of the Marconi-E.M.I. studio. There are two stages here, too, but they are in different positions than the neighboring ones.

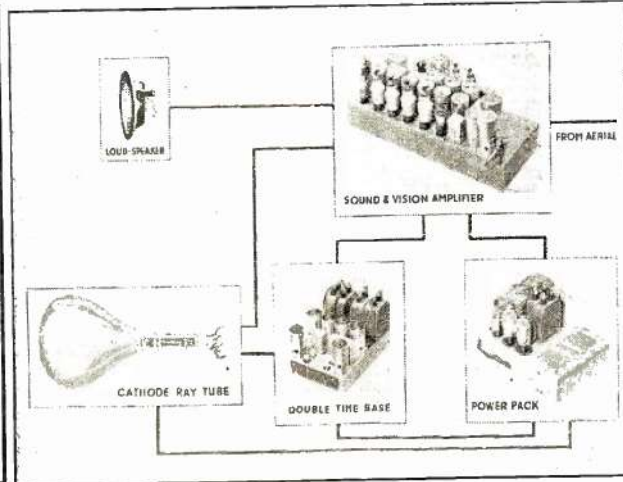
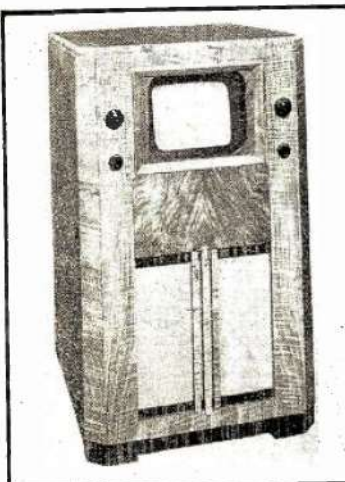
Five dressing rooms for men and five for women are close by, each suite having its own bath. Forty artists can be accommodated in a large chorus room. Just like the theatre, each dressing room is equipped with a call buzzer.

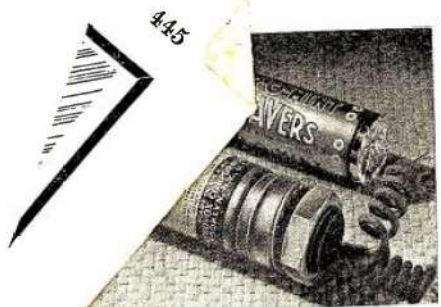
**Many Makes Available**

The Alexandra Palace Theatre has also been acquired by B.B.C., but the immediate use of the auditorium is planned for rehearsals and experiments. There is a separate band-room—the counterpart of an orchestra pit—where accompanying music will originate.

All prominent radio manufacturers of the British Isles were quick to fall in line with receivers for the public demand. As anticipated, the cost of initial equipment is high, the average model costing about \$500.

Marconiphone, Bush, Philips, Baird, H. M. V., General (Turn to page 446)





## PACE-SAVER Electrolytics



Popular 1-in. dia. can job with height cut in half for given capacity. Or for same height, twice former capacity. A remarkable bulk reduction without sacrificing performance. Just ask your jobber for the AEROVOX GLS electrolytics.

Note 12 mfd. 450 v. unit above for size comparison. 250 and 450 v. working. 4 and 16 mfd. Insulated mounting. Separate leads.

1-in. dia. 2-3/16 to 3/8 in. high. Just the thing for better filtering in tight places.

**New CATALOG:** More pages. More items. More choice. Lower prices. Ask your jobber for a copy, or write us direct.



## POWERTONE 5 Band 4-Tube A.C. D.C. Communications Receiver



Recognized by amateurs and short-wave experimenters as one of the year's outstanding receivers. Contains the following features: Hand-tuned tuning; New metal tubes; 5-Airplane dial; Built-in dynamic speaker; 5-Band switch coil assembly; 1.5-550 meter tuning, no extra A.C. or D.C. operation, and many others too numerous to mention. Efficient circuit employs 2-6KT's, 1-43, and 1-2525. Special phone jack automatically cuts out dynamic speaker for headphone reception. Complete Kit of Parts

Your Cost \$10.50  
Wiring and Testing Extra. 2.50  
Matched Sylvania Tubes. 2.25  
All Metal Crystal Cabinet. 2.25

## BUDDY 2-TUBE A.C. D.C. Receiver



Uses but two tubes but provides performance equal to that of receivers employing three. A newly designed circuit makes use of 16J7 metal tube and 1-12A7 as a combined rectifier and detector. pentode output tube. Coils furnished. Tune from 15 to 200 meters. Airplane dial aids materially in tuning-in stations.

Complete Kit of parts. \$4.50  
Wiring and Testing. 1.25  
Matched Sylvania Tubes. 1.50  
9 1/2-15 and 200-2000 meter coils. 1.75  
Metal Crystallized cabinet. .95

**TRY-MO RADIO CO., INC.**  
85 Cortlandt St., N. Y. C.

## Exposing Cut-Rate Service "Gyps"

(Continued from page 409)

month among concerns featuring cheap prices is far in excess of the highest rates commonly charged by reputable concerns for similar jobs. Thus the set owner who shops around for cut-rate service prices actually pays more in the majority of cases than does the owner who selects a dependable serviceman who makes no bid for bargain work.

### A Successful Policy

It must be remembered that, in the final analysis, the best assurance of sustained success must rest on competent, conscientious workmanship at a price fair to the customer and to the worker.

## Mr. Serviceman!

This and the previous article of this series constitute a powerful sales argument for the legitimate serviceman. Some servicemen have indicated a desire for reprints to distribute among their customers and prospective clients. Would you care to have reprints for this purpose if you could buy them at actual cost? If so please drop a card to the author, simply stating that you like the reprint idea and the approximate number you might need. You will not be obligated in any way. If the response to this invitation is large enough to warrant making reprints, you will be informed, a sample sent, and you can then place a definite order if you so desire.

## British Television

(Continued from page 392)

Electric, Pye, Ecko and other eminent brand names appeared on the lines immediately available to the public.

An additional move of manufacturers was to include the television band (7 to 16 meters) in standard sound receivers, permitting possible future adaptation of the instruments for television reception. As in the American sets demonstrated privately to the press, most British models use the cathode-ray tube mounted vertically with the picture reflected on tilted mirror-lined lids. Receivers use an average of 25 tubes.

Scophony has supplemented cathode-ray receivers with opto-mechanical instruments projecting images of 12 by 16 inches, for home use, to 9 by 12 feet for theatres.

Virtually all models on the market function on both 240 lines, at 25 frames per second, and 405 lines, at 50 frames per

second. Initial transmissions were kept in the neighborhood of 6 to 8 meters.

Visitors returning from London have remarked how television-minded the nation has become. A new era of industry prosperity is seen ahead in the introduction of visual transmissions.

How soon will America join the world television parade? Our laboratories admittedly have everything Europe has—and more. Now is the time to come forward with public participation in the new art. America should establish the same leadership in television as it has in broadcasting!

### Revision of Wire Charges

Washington, D. C.—The Long Lines Division of the A. T. & T. announced a new schedule of charges governing the furnishing of program transmission channels. The new schedule is expected to save customers \$250,000.00 a year. The adjustments, voluntarily filed by the telephone company, remedy the complaints by broadcast station licenses concerning rate practices; they do not effect a general reduction in rates, however.

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