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

England 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...
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 B.B.C. 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 300 feet above sea level. Nearly all London can be seen from the antenna site—an important point where ultra-slim 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 B.B.C. 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 B.B.C. Such refinements as dressing rooms for artists, a restaurant, store rooms for scenery and props, and cinema projection, 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 production 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 studio.

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.
Exposing Cut-Rate Service “Gyps”

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month among concerns featuring cheap prices is far in excess of the highest rates commonly charged by reputable concerns for similar jobs. Thus the net user 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 success or failure of a business depends on competent, conscientious workmanship at a price fair to the customer and to the workman.

British Television

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Electric, Pye, Ecko and other leading brand names appeared on the air immediately after the war. An additional move of manufacturers was to include television bands (7 to 24 MHz) in standard broadcast receivers, permitting possible future expansion of the service for television. In the United States it was demonstrated privately to the press, that British models use cathode-ray tubes mounted vertically with the picture reflected on a mirror surface. Receivers use an average of 25 tubes.

The present has supplemented cathode-ray tubes with opto-mechanical instruments projecting images of 12 by 16 inches for home use, and 16 by 12 feet for theatres. Virtually all models on the market function on both 240 lines 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 on how television-minded the nation has become. A new era of industrial progress is clearly ahead, in the introduction of electronic transmissions.

How soon will America join the world television parade? Our laboratories admitted that all we need is a change in public sentiment. America should establish the same leadership in television that it has in broadcasting.

Revision of Wire Charges

Washington, D. C.—The Long Lines Division of the A. T. & T. group announced a new schedule of charges covering the furnishing of program transmission. The new schedule is expected to save consumers $150,000 per year. The adjustments, voluntarily filed by the telephone company, remedy the complaints by broadcast station licensees concerning rate practices; they do not set a general reduction in rates, however.

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Mr. Serviceman!

This is an old article about servicing television receivers. It emphasizes the importance of choosing a reputable service provider, as cut-rate service often results in higher long-term costs. It also discusses the success of television in the United States, with initial transmissions kept in the neighborhood of 6 to 8 meters. Visitors returning from London were impressed by how television-minded the nation had become. The article predicts that America would soon join the world television parade, with laboratories ready to demonstrate how television could be brought to the nation.

Regarding the revision of wire charges by the A. T. & T. group, the new schedule is expected to save consumers $150,000 per year. The adjustments were voluntarily filed by the telephone company to remedy complaints by broadcast station licensees concerning rate practices. The revisions do not set a general reduction in rates, however.