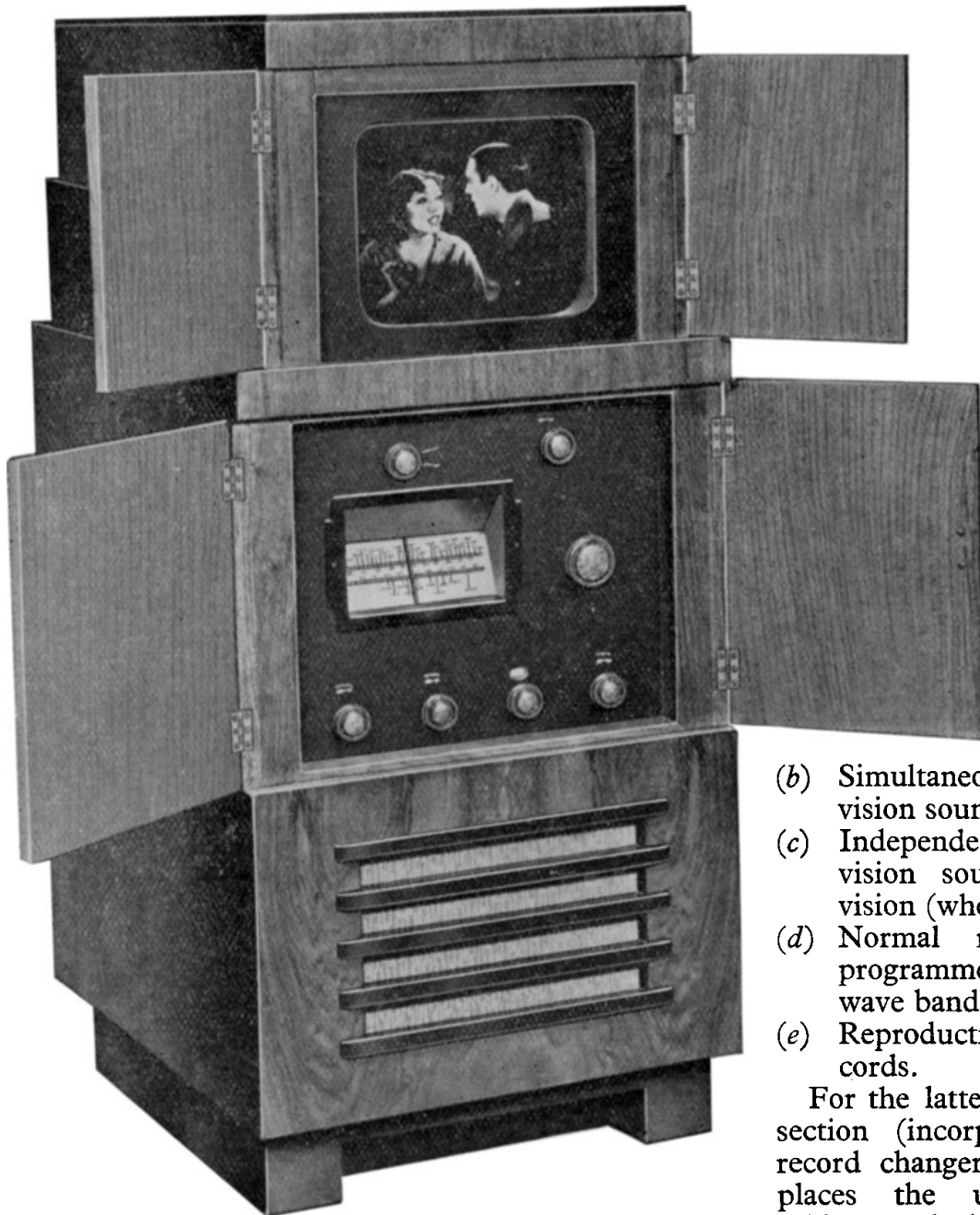


# SPECIAL ADVANCE INFORMATION

on

# COSSOR TELEVISION RECEIVERS

## MODELS 137T & 237T



*This illustration shows the end of the cathode ray tube and the arrangement of the controls. Note the doors which protect the tube and conceal the controls when the Receiver is not in use.*

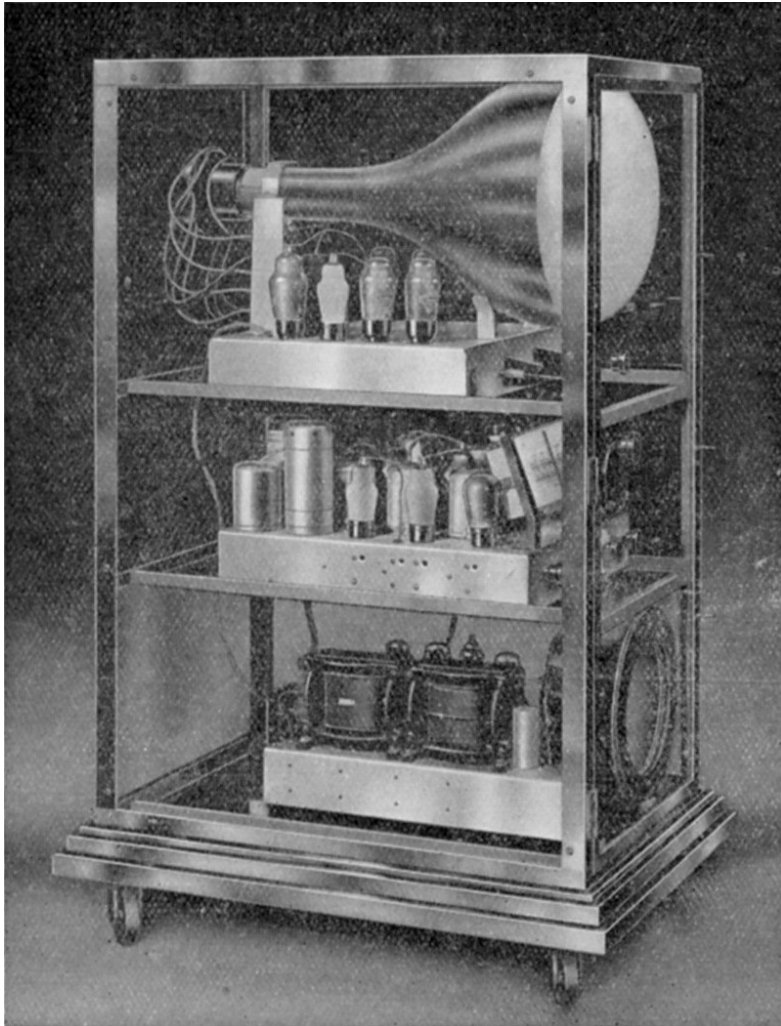
- (b) Simultaneous reception of the television sound programme.
- (c) Independent reception of the television sound programme without vision (when required).
- (d) Normal reception of broadcast programmes on medium and long wave bands.
- (e) Reproduction of gramophone records.

For the latter purpose a gramophone section (incorporating an automatic record changer) is available. This replaces the upper section of the cabinet and the receiver then becomes Model 237T. In every way it can then be considered "the complete home entertainer."

**T**HIS issue of the *Courier* makes history—here for the first time we show the new Cossor Television Receiver, now in production at Kelvin Works. Designated Model 137T, it provides the following facilities:—

- (a) Television reception of both systems radiated by the Alexandra Palace transmitter.

The television picture is reproduced on a 13½" diameter cathode ray tube. The actual picture size is 10" × 7¾", which is a convenient size for ordinary home viewing, the picture being viewed directly, and not through a lens or



*The three chassis of Model 137T. This illustration gives a good idea of the elaborate internal construction of the up-to-date Television Receiver.*

The Receiver is arranged internally in three separate units, one above the other. At the top the vision unit, next the radio receiver, and at the bottom the power unit, which supplies power for the above two units. This arrangement of independent chassis has obvious advantages from the point of view of service. The working controls on the vision unit are only two in number. On the left is a system switch, by means of which the receiver is adjusted for reception of the 240 line or 405 line standard. The change-over between the two systems is effected by this switch alone, without the necessity for any other adjustments whatever. On the right is the brightness knob, by which the mean brightness level of the picture is adjusted.

The remaining controls belong to the radio receiver, and are as follows. Bottom row, left to right :—

mirror. Pictures are reproduced in a pure black and white, and the level of brilliance is such that viewing is comfortable, without going to extreme measures of room darkening ; on the other hand, the brilliance has not been made so high that uncomfortable flicker is encountered on the 240 line standard. As in the cinema, however, the results are deteriorated if too much stray light is allowed to fall on the viewing screen, and the room lighting and placing of the set should be so arranged that direct light does not fall on the screen.

The vision and radio equipments have been so planned that full advantage is taken of the high definition which is expected from the London transmissions.

In the design of this set a great deal of effort has been devoted to simplification, the objects being to reduce the cost of the set to the lowest possible figure consistent with a high quality of performance, to make it as reliable as possible, and above all to render it easy to manipulate. The controls have been reduced to a basic minimum.

1. Oscillator trimmer for tuning in simultaneously the vision and sound on ultra short waves. This knob will hardly ever need adjustment after it has once been set correctly, but as the tuning is sharp on the sound, the control has not been made a pre-set.

2. Contrast knob. This knob is actually a gain control on the ultra short wave receiver, and is set to give a comfortable contrast level for the picture.

3. A six-point switch giving the following positions : off, gramophone, long wave, medium wave, ultra short wave sound, and television (with sound).

4. A sound volume control knob. This functions in all positions of the selector switch, including the gramophone position.

Immediately above this row of four knobs there is a large tuning knob and station scale for the long and medium broadcast ranges.

All of the control knobs are located behind a pair of doors in front of the cabinet, and

accordingly no controls are visible in ordinary use.

The aerial system recommended for television reception will vary according to local conditions. In districts of good field strength an internal aerial may be contemplated, which may, if desired, be of dipole form. If the field strength is weak an external dipole arranged as high as possible above the ground is preferred.

Such a dipole aerial may also be used if desired as a broadcast aerial, or optionally, the existing broadcast aerial may be employed for this purpose.

The equipment is for A.C. mains only, 50 cycles, a tapping screw being provided for 240, 220 and 200 volts respectively. In a D.C. district it is necessary to make use of a rotary converter to provide a source of alternating current.