

*your*  
**EKCOVISION**  
*instruction book*

14" TUBE TABLE MODEL T310  
with V.H.F. RADIO

*THIS booklet has been prepared to help owners of Ekcovision receivers to get the best out of the superb entertainment offered by television. It is not an installation guide because Ekco policy ensures that each receiver will be installed by a competent Ekcovision Dealer—the owner need grasp only the simple operating instructions. Where reference to installation is made, it is merely to help the owner to a fuller understanding of the normal operation of the receiver.*

#### **V.H.F. RADIO BROADCASTS**

*The technique of Frequency Modulation (F.M.) is employed by the B.B.C. for the V.H.F. (Very High Frequency) radio broadcasts now becoming available in most parts of the country. This technique affords a new standard of radio reception to which your Ekcovision receiver can do full justice.*

*Most owners of this Ekcovision Model will be able to look forward to the advantages of V.H.F. radio reception even if they are not at present within range of any of the existing transmitters.*

#### **★ IMPORTANT NOTE**

**YOUR GUARANTEE APPLICATION MUST BE  
POSTED WITHIN 7 DAYS—SEE BACK COVER**

# EKCOVISION

## Aluminised Tube Table Model with V.H.F. Radio

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### YOUR AERIAL INSTALLATION

In ensuring the best possible reception of V.H.F. radio or television, your aerial is a most important item. The performance of a good receiver can be seriously impaired by the use of an unsuitable or inferior aerial installation, although in some localities a simple and inexpensive aerial will be satisfactory. Your Ekco dealer will be glad to advise you concerning the most suitable aerial installation for your locality. For V.H.F. reception, this receiver normally utilises your television aerial, but in some cases either a modification to your television aerial or a separate V.H.F. radio aerial may be required.

The receiver incorporates many important advances in television technique among which are the following:

### V.H.F. RADIO RECEPTION

The high-efficiency Turret Tuner incorporated in this receiver has twelve positions, any eleven of which can be pre-tuned, with suitable coils, for any TV reception channel at present envisaged. The twelfth position is provided with coils to suit the V.H.F. (F.M.) radio band which allows the B.B.C. Home, Light and Third Programmes to be tuned in as required by means of the Fine Tuning Control provided.

### TELEVISION RECEPTION

Coils are already fitted and pre-tuned to cover a number of television channels including the B.B.C. and I.T.A. television channels appropriate to your locality at the time the receiver left the factory. Should the need ever arise your Ekcovision Dealer can quickly fit coils for other channels.

### FULL AUTOMATIC CONTROL OF PICTURE AND SOUND

This is designed to maintain a steady picture when signal strength variations are caused by atmospheric fading, change of channel or aircraft flying nearby.

### DAYLIGHT VIEWING

An optical filter and aluminised tube ensure pictures of exceptionally high contrast and definition, giving superior daylight viewing. In order to preserve the superb tonal range of the picture it is advisable to prevent direct light from the window, etc., from falling on the screen.

## MAINS SUPPLY

This Ekcovision receiver is for operation on mains supplies of either 200-250 volts A.C. 50 cycles or 200-250 volts D.C. The mains tapping panel which is inside the back of the receiver must be correctly adjusted by the installing engineer to suit your particular supply. This entails adjustment of four connections.

*Note: On D.C. Mains, the mains plug must be inserted in your mains socket the same way round as it is left by the installing engineer. If the plug is inadvertently reversed, the receiver will not operate while, in the case of 200 volt D.C. mains, the receiver fuses will 'blow'. This can be avoided by using a non-reversible mains plug.*

## OPERATING CONTROLS

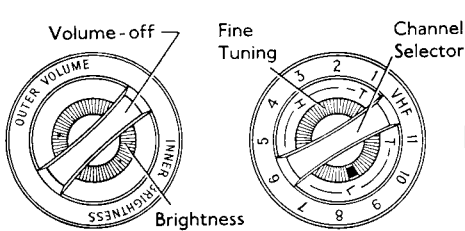


Fig. 1.—The Operating Controls.

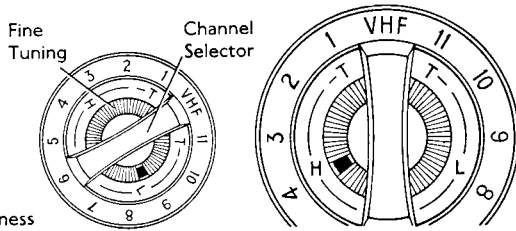


Fig. 2.—Showing V.H.F. Radio Selected.

### VOLUME/ON-OFF CONTROL

Turned fully anti-clockwise, this switches the receiver 'off'. Turned clockwise, it first switches the receiver 'on' and then increases the sound volume.

### BRIGHTNESS CONTROL

Turned clockwise, this increases the brightness of the picture and vice-versa. It is adjusted according to individual preference but it should not be turned any further in a clockwise direction than is required to provide a satisfactory picture. It is to some extent interrelated with the pre-set Contrast Control.

### CHANNEL SELECTOR

This is simply turned to bring the appropriate number on the dial uppermost to receive the required television programme. Your Ekcovision Dealer will tell you which number(s) correspond(s) with the programme(s) available in your locality.

For V.H.F. radio reception, the Channel Selector is turned to bring 'V.H.F.' uppermost, the required radio programme can then be tuned in by means of the Fine Tuning Control.

## FINE TUNING CONTROL

Although the Channel Selector selects the required television programmes, the Fine Tuning Control must be adjusted also for reception of each programme.

For V.H.F. radio reception, after the Channel Selector is turned to bring 'V.H.F.' uppermost, the Fine Tuning Control is turned so that its indicator mark is within the 'H', 'L', or 'T' sectors, to receive the Home, Light or Third programmes respectively. The Fine Tuning Control must be carefully adjusted for clearest reception of each station.

When the Channel Selector is in the 'V.H.F.' position, the Fine Tuning Control is automatically illuminated, to provide a visual reminder that the receiver is switched on. Fig. 2 shows the controls set for receiving a V.H.F. radio programme.

## OPERATION

To switch on, turn the Volume/On-Off Control clockwise about half a turn. If the controls have not been altered since the instrument was last used, sound will be heard within about half-a-minute and, if switched to television, the picture will appear after a further short interval.

It is important to check the adjustment of the Fine Tuning Control as incorrect adjustment may result in either an inferior picture or even no picture or sound at all. It will be found that if this control is turned slightly clockwise from its correct position, horizontal dark streaks will appear on the screen and the picture will be distorted in sympathy with the accompanying sound. If the control is now turned slowly anti-clockwise from this position, the dark streaks will disappear leaving a clearly defined picture as the correct tuning point is reached. If the control is turned anti-clockwise beyond the correct tuning point, the picture clarity will suffer and sound will become weaker. Turning the control very far in either direction may lose picture and/or sound altogether.

To change to another television programme, turn the Channel Selector to bring the required channel number uppermost **and readjust the Fine Tuning Control to find its correct position for the station concerned.** It is preferable to avoid passing through the 'V.H.F.' position when changing from one television channel to another.

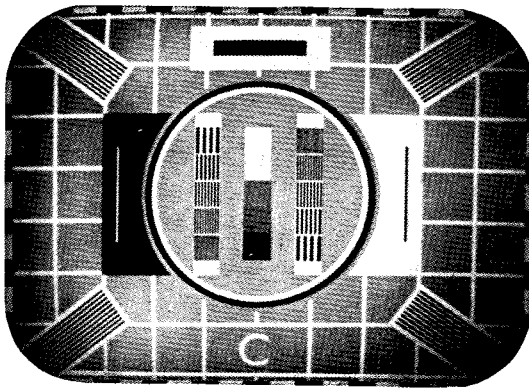
To select a V.H.F. radio programme, turn the Channel Selector to bring 'V.H.F.' uppermost, the Fine Tuning Control will then light up. Now turn the Fine Tuning Control until its indicator mark is within the 'H' sector for the Home Service, or 'L' for the Light Programme, or 'T' for the Third Programme. Then adjust it slightly either way as required for clearest reception.

## OPERATION (cont.)

When tuning a V.H.F. radio programme, it will be found that, as the Fine Tuning Control is rotated slightly about the correct position, there will be a small arc within which clear, noise-free reception is obtained. The correct tuning point is in the centre of this arc. If the locality in which the receiver is used is subject to severe interference, one definite position will be found within the arc at which noise and interference are reduced to a minimum.

When switching from a radio programme to television, the television sound can be tuned in immediately but there will be a short interval before the picture appears.

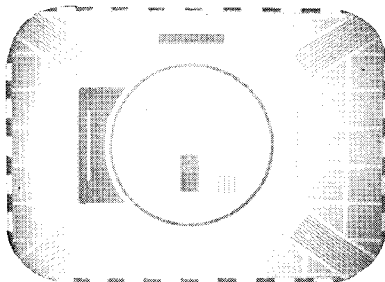
*Note: In the unlikely event of a fault in the receiver causing a bright spot or line to appear in place of the picture, the receiver should be immediately switched off to avoid damage to the cathode-ray tube. The fault should be rectified by your Ekcovision Dealer before switching on again.*



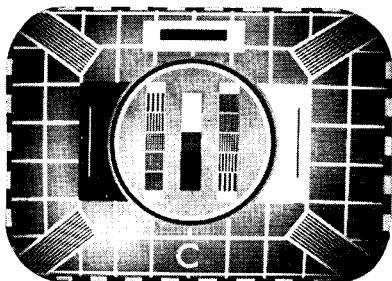
The effects of adjusting controls can be most clearly seen when receiving a test pattern such as this or the tuning signal which is transmitted immediately prior to the commencement of programme transmissions.

## PICTURE FAULTS AND HOW TO CORRECT THEM

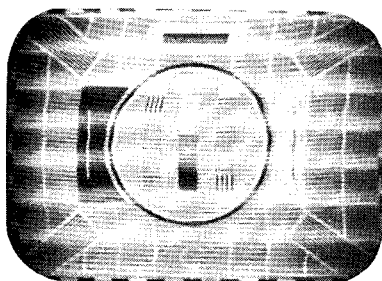
When your Ekcovision Dealer installs the receiver, he will explain how easy it is to get a satisfactory picture. The following illustrations, showing various faults, will help to remind you. Once the receiver has been installed, there will seldom be occasion to touch the pre-set controls, but you should have some knowledge of their purpose and use. The pre-set controls are described and illustrated on pages 9 and 10.



**Reduce Brightness and increase pre-set Contrast if necessary.**



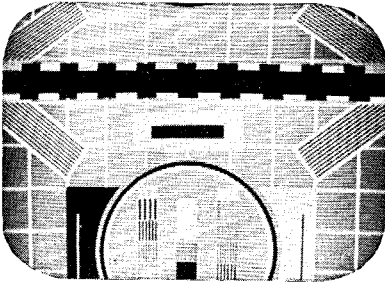
**Increase Brightness and reduce pre-set Contrast if necessary.**



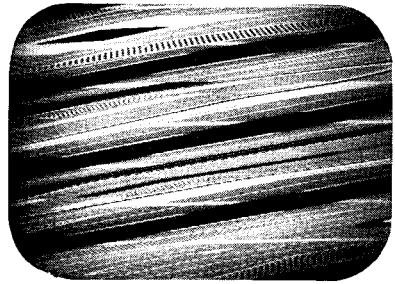
**Fine Tuning Control is slightly too far clockwise — Readjust as described under 'Operation'.**

## PICTURE FAULTS

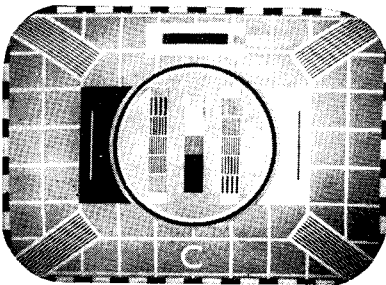
(continued)



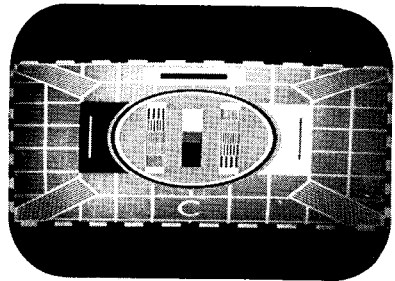
Picture moving vertically up or down—Adjust pre-set Vertical Hold. (See pages 9 & 10.)



Picture breaking into strips—Adjust pre-set Horizontal Hold. (See pages 9 & 10.)



Picture highlights turning black — Adjust Automatic Interference Inverter. (See pages 9 & 10.)



Picture not high enough (or if too high)—Adjust Picture Height. (See pages 9 & 10.)



## PRE-SET CONTROLS

(See illustrations on next page)

### SIDE

1. **CONTRAST CONTROL.** This alters the relative level of illumination of the various objects in the scene being transmitted. The correct setting is a matter of individual preference. If it is turned too far clockwise the picture will lack half-tones (i.e., it will be sharply black and white). If it is set too far anti-clockwise, the picture will be ' flat ' and without contrast. Generally it will be found that an increase in contrast requires a decrease in brightness and vice-versa.
2. **VERTICAL HOLD ADJUSTMENT.** This locks the picture in a vertical direction. It is correctly adjusted when it is set approximately midway between the two points at which the picture fails to remain stationary.
3. **HORIZONTAL HOLD ADJUSTMENT.** This locks the picture in a horizontal direction. It should be set approximately midway between the two points at which the picture ' breaks up '.

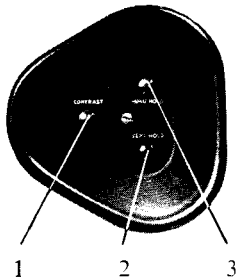
### REAR

4. **AUTOMATIC INTERFERENCE INVERTER.** This is set by the installing engineer to suit local reception conditions and it automatically accommodates itself to changes in the contrast control setting. Should it become necessary to reset it, first turn the control fully anti-clockwise, then, with a normal picture on the screen, turn the control slowly clockwise until the brightest highlights in the picture begin to darken; then turn the control anti-clockwise again just far enough to lose the darkening of the highlights. This will result in any large bright spots, due to electrical interference, being reduced as far as possible to less noticeable small black specks.
5. **PICTURE HEIGHT ADJUSTMENT.** This is adjusted at installation so that the picture just fills the mask from top to bottom.
6. **VERTICAL LINEARITY ADJUSTMENT.** This is adjusted at installation so that there is no stretching or cramping of parts of the picture in a vertical direction; it will also affect picture height. It can only be adjusted when a regular pattern such as the test-card or tuning signal is being received.

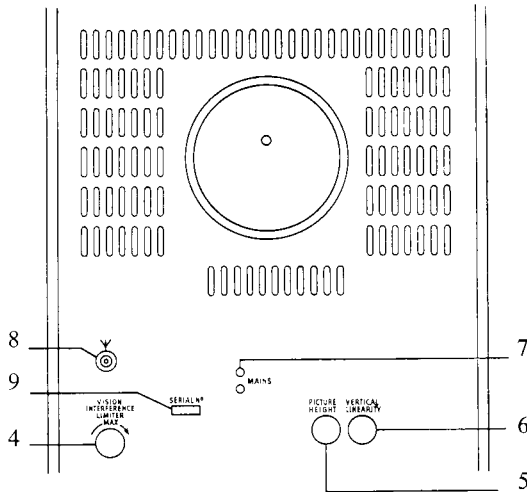
## KEY TO DIAGRAMS

1. Contrast.
2. Vertical Hold.
3. Horizontal Hold.
4. Automatic Interference Inverter.
5. Picture Height.
6. Vertical Linearity.
7. Mains Socket.
8. Aerial Socket.
9. Serial No.

### SIDE CONTROLS



### REAR CONTROLS, ETC.



## GENERAL NOTES FOR EKCOVISION OWNERS

E. K. Cole Ltd. are satisfied that an efficiently operated Maintenance Scheme is a service to be recommended to all who buy a television receiver. If, after due consideration, you decide to take advantage of such a service, then you should discuss this with the Ekco Dealer who supplied your receiver.

Your Ekcovision receiver is capable of giving years of enjoyment and although it is more complicated internally than an ordinary radio receiver, it is nevertheless extremely reliable and simple to operate.

We wish you to get the maximum enjoyment from your receiver, and the best advice we can give is to call on your Ekco Dealer immediately in case of doubt. He is a specialist who is appointed to help.

If for any reason you wish to consult us direct—for example if your local dealer is not available—we shall be pleased to answer your query.

Television short-wave signals are liable to interference from certain electrical installations, but the G.P.O. has set up a special organisation to deal with this. You should, in your own interest as well as that of other viewers, immediately report any persistent case—using form T466G obtainable at any post office.

During emergency periods when there is a heavy drain on the electricity mains, the functioning of your receiver may be temporarily impaired.

Remember that you must have a television licence from the G.P.O. If you already have a radio licence and you produce it, you can obtain a rebate depending on the date of its expiry.

The EKCO organisation is renowned for its pre-eminence in the practical application of all the best technique in radio and television. By patent exchange agreements with other important British and Foreign research organisations, the best developments, not only of the Ekco Laboratories, but also those of all the most important laboratories of the world are incorporated in Ekco products.

### *The Ekco Guarantee*

In common with all Ekco Radio Products, EKCOVISION receivers are guaranteed for twelve calendar months from the date of delivery to the original user, subject to the conditions set out on the Guarantee card sent with the receiver. It is essential for you to read, complete and return the card within seven days to enable us to register your guarantee. The separate Cathode-ray Tube Guarantee card must be completed and returned to the cathode-ray tube manufacturers at the same time.

## **E. K. COLE LTD.**

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