DECCA

Model 1000

LARGE SCREEN

(4ft. x 3ft.)

PROJECTION TELEVISION RECEIVER

OPERATING INSTRUCTIONS

For best results from your

DECCA LARGE SCREEN PROJECTION TELEVISION RECEIVER

please read these Instructions carefully

INSTALLATION

The instrument will normally be set up for operation by the installation engineer. These instructions, therefore, deal mainly with the connecting up of the receiver, and with the adjustments required for everyday use. Should, for any reason, the receiver be left without having been set up for working, it would be advisable to call in a competent service engineer, as the initial setting-up needs to be carefully performed.

AERIAL

Any properly designed television aerial may be used, provided that the feeder cable is of the 80 ohms co-axial type. The advice of a dealer will be helpful in fitting an aerial as he will be familiar with local conditions. The aerial connection is made to a co-axial socket at the lower front of the receiver. An earth connection is not essential, although the earth pin of a three-pin mains plug may be used if available.

MAINS SUPPLY

The receiver is suitable for use on Alternating Current, 50 cycles per second, and on voltages between 200 and 250. On no account must the instrument be connected to a Direct Current supply or serious damage may result. The mains connection is made to a socket at the front of the receiver, adjacent to the aerial socket. A mains plug of suitable type should be fitted to the free end of the mains lead.

The engineer who installs the instrument will adjust the mains voltage tapping according to the actual input voltage. Before connecting the receiver to the mains point make sure that the ON/OFF switch (Left-hand knob on the receiver control panel) is in the 'Off' position; that is, turned fully anti-clockwise.

SITING THE RECEIVER

The correct distance between the receiver unit and the screen is 8 ft. 6 ins., measured from the front of the receiver cabinet. The receiver must be placed directly in front of the screen and squarely facing it. An adjustable wing-nut is fitted to the optical unit to enable the angle of the lens to be varied should it be found that the height of the picture is not correct.

Model 1000 Wall Screen: This should be hung so that the lower edge of the frame is approximately 40 ins. from floor level. The two struts at the top of the screen must be extended towards the wall so that the screen takes up the correct angle in relation to the projection lens.

OPERATING THE RECEIVER

On a panel at the back of the receiver will be found three control knobs. Reading from left to right when facing the screen these are: **Volume and On/Off; Focus; Brilliance.**

To operate the receiver, set the Focus control to approximately two-thirds of its travel in a clockwise direction, and the Brilliance control to minimum (fully anti-clockwise). Switch on by means of the left-hand knob and wait for about one minute for the valves to warm up.

Turn the Brilliance control slowly clockwise until an image appears on the screen. If the control is turned too far excessive brightness will prevent the picture from being resolved.

When a picture of desired brightness has been obtained, the Focus control (centre knob) should be adjusted for sharpest definition.

Movement of the controls should be gradual for best results. Since they are to some extent interdependent, adjustment of one may necessitate a slight alteration of either or both of the others. These controls, however, will not need frequent adjustment. It is advisable to make the final adjustment with the Focus knob, once the best picture has been obtained.

The Volume control should be set to the required level of sound according to the size of the room in which the receiver is used. The same knob is used to switch off the receiver, the 'Off' position being at the extreme end of its anti-clockwise travel.

HINTS ON USING YOUR DECCA MODEL 1000

Don't connect the instrument to a mains supply point without making sure that the current is A.C. and the voltage between 200 and 250.

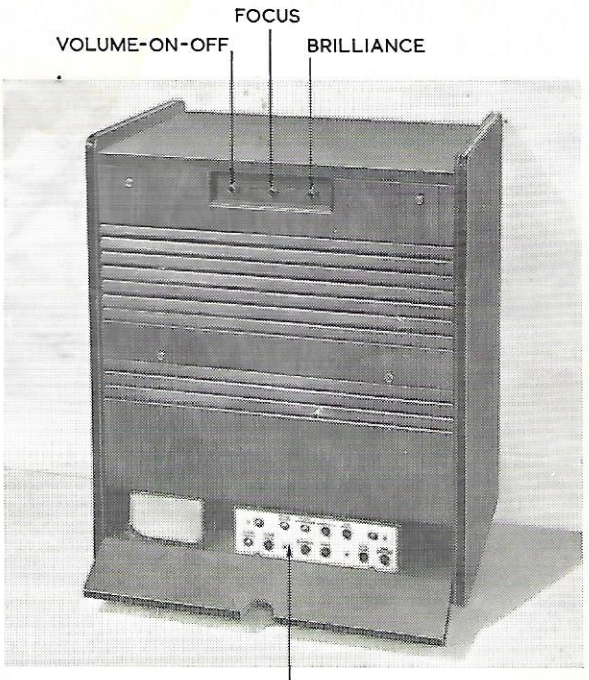
Don't make any unnecessary adjustments to the auxiliary controls or allow an inexperienced person to touch them.

Don't attempt any internal adjustment to the receiver.

Don't try to clean the mirror inside the optical unit: this is a specialist's job.

Do bear in mind that a television receiver only gives of its best when used on an efficient and properly designed aerial.

Do remember that in the event of a breakdown occurring it will help your dealer to provide prompt service if you make a note of any symptoms observed.



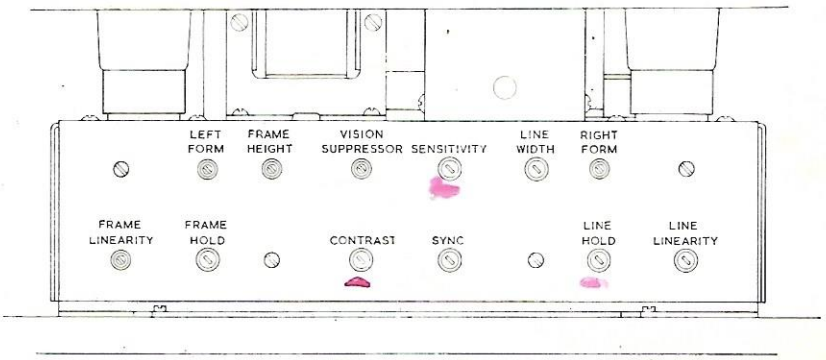
Receiver Controls.

AUXILIARY CONTROLS

These are grouped together behind the hinged flap at the lower part of the back of the receiver cabinet. The installation engineer will set these controls for best results and it is not recommended that any attempt at further adjustment be made unless it is evident that re-setting is necessary. Before making any adjustment the following details concerning the purposes of each control should be studied, as picture quality and form may be seriously affected by wrong settings.

Each adjustment must be carefully made and only one control should be moved at a time. It will be seen that some controls require the use of a screwdriver, while others have a knurled knob.

The positions of the auxiliary controls are shown below, and the function of each is explained in the following notes.



ADJUSTMENT OF AUXILIARY CONTROLS

CONTRAST

This governs the ratio of black to white in the picture and is used in conjunction with the receiver Brilliance control. If turned too far in either direction, the picture may disappear altogether.

SENSITIVITY

This control acts in the same way as the Contrast control, but is meant to be set to its best position when the receiver is installed, depending on local conditions. Once set, it should not be necessary to alter the setting, unless the receiver is moved to a different area or some change in the aerial is made.

VISION SUPPRESSOR

This reduces the effect of interference, such as is caused by car ignition systems, these normally giving rise to white spots or streaks on the screen. It should be set for best results according to the extent of the interference. Loss of picture detail will result if the control is turned too far.

LINE WIDTH

May be adjusted as required to make sure that the picture just fills the screen in a horizontal direction.

FRAME HEIGHT

This may be adjusted so that the picture just fills the screen in a vertical direction.

LINE HOLD

Should there be any tendency to 'tearing' across the picture, a slight adjustment of this control will restore it to normal.

FRAME HOLD

This may be used to correct frame slipping or jumping, resulting in the picture revolving in a vertical direction. The movement of the control is gradual, and a setting should be made for best definition.

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The following controls are set at the factory and should not be disturbed unless absolutely necessary.

RIGHT FORM AND LEFT FORM

These two controls affect the shape of the picture. If, with the receiver correctly positioned in front of the screen the picture is not completely rectangular, the Form controls should be carefully adjusted until it is so.

LINE LINEARITY

This is provided to correct any horizontal distortion at the left-hand side of the picture. Adjustment should not be attempted unless linearity is definitely poor.

FRAME LINEARITY

The vertical linearity is affected by this control, mis-adjustment resulting in distortion of the top section of the picture.

SYNC

This is carefully set at the Factory and it is not recommended that any attempt at adjustment be made except by an experienced engineer as picture quality and steadiness will be impaired if wrongly adjusted.

Should the user have occasion to carry out any of these adjustments it is strongly recommended that use be made of the B.B.C. Test Card transmitted during morning programmes. It is not possible to judge the correct height and width of the picture on an ordinary studio scene.

VALVES AND CATHODE-RAY TUBE

A total of twenty-eight valves are used in the receiver, the type numbers and functions of these being as shown below. The cathode-ray tube is of the miniature projection type, and is a Mullard MW6-2.

Valve replacement should be left to a service engineer, as damage to the valve and/or the receiver can result from the fitting of an unsuitable type of valve.

Under no circumstances should the user attempt to replace the cathode-ray tube as the efficient working of the receiver depends largely on the correct positioning of the tube. In addition, the high voltage present on the anode of the tube can be the cause of an inexperienced person receiving a severe shock.

Valve Types and Functions:

R.F. amplifier	EF42
Frequency-changer	EF42
1st Vision I.F.	EF42
2nd Vision I.F.	EF42
Vision detector	EB91
Video amplifier	6F13
Sound I.F.	EF42
Sound detector and Interference spotter	EB91
Cathode follower and Right Form control	ECC34
Sync. separator	EB91
Sync. amplifier	6F14
Pulse limiter	6L18
Interference limiter and Frame pulse separator	EB91
Frame oscillator	T41
Frame output	Pen 45
Line oscillator	T41
Line output	EL38
Left Form control	EL38
C.R.T. protection	6SN7GT
C.R.T. protection and Brilliance level control	6SN7GT
Audio amplifier	6L18
Audio output	6V6GT
H.T. rectifier	GZ32
E.H.T. rectifiers	Three EY51
Blocking oscillator	EBC33
Pulse generator	EL38

MAINTENANCE

Although these receivers are designed to give reliable operation over long periods, they will naturally require some attention from time to time. If a falling-off in reception becomes apparent, or the receiver fails to function, a Decca dealer should be consulted. He will in most cases be able to provide the necessary service without undue delay. In event of difficulty, get in touch with Decca Radio & Television, 1-3, Brixton Road, London, S.W.9, who will be glad to advise you.

Apart from actual servicing, the receiver needs little in the way of maintenance. The screen surface may be wiped occasionally with a soft, dry duster, taking care to avoid leaving finger marks on the surface. Chemical preparations should not be used to clean the screen as these may remove the aluminium coating.

The optical lens recessed in the aperture at the front of the receiver may also be gently wiped with a soft cloth. Great care must be exercised to ensure that the controls of the optical unit are not disturbed. The cleaning of the lens should only be attempted when the receiver is switched off or disconnected from the mains supply.

NOTE

The optical unit produces a concentrated source of light for projecting the picture to the screen. No danger to the user results from this, but users should avoid looking directly into the lens when the receiver is working as the extreme brilliance of the light source will be found disconcerting to the vision.

WARNING

High voltages exist inside the receiver. The front and rear panels of the cabinet should not be removed except by an experienced service engineer.

WARRANTY

All Decca instruments carry a Warranty which extends for twelve months from date of purchase. The Warranty covers component parts which prove to be defective within this period, but is not applicable to valves or cathode-ray tubes, these being subject to the separate guarantees issued by their makers.

The Warranty applies only if the registration card supplied with the instrument is properly filled in and returned to the address printed on it **within seven days of purchase.**

Attention is drawn to the fact that requests for service should, in the first instance, be referred to the dealer from whom the instrument was purchased. Decca dealers are entitled to make a reasonable charge for their services rendered in implementing the terms of the Warranty, full details of which appear on the Warranty Card issued with the instrument.

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