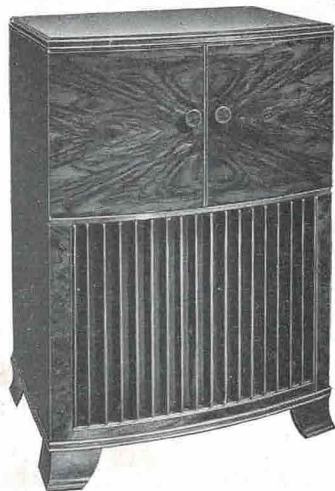


# DECCA MODEL 121 PROJECTION TELEVISION RECEIVER

TECHNICAL SPECIFICATION • ALTERNATIVE CABINET-FINISHES • PRICES



**Circuit:** Single sideband superheterodyne using a common R.F. stage before the frequency changer; two vision, and one sound I.F. stages. Separate models are supplied for each of the B.B.C. television channels, a special double sideband model being available for the London area only.

Three valves are used in the synchronization circuit and a stable picture is assured under varying degrees of signal strength and levels of interference. Interference limiters are incorporated for sound and vision.

Gas-filled triodes are used as timebase oscillators, and a very linear scan is obtained. The miniature cathode-ray tube is provided with a final anode voltage of 25,000 obtained from three high voltage rectifiers in a voltage trebling circuit. Full-wave H.T. rectification is used and the receiver chassis is isolated from the mains, giving the maximum degree of safety in operation.

## PRICES

Model 121L .. .. .	Alexandra Palace
Model 121M .. .. .	Sutton Coldfield
Model 121N .. .. .	Holme Moss
Model 121S .. .. .	Kirk O'Shotts
Model 121W .. .. .	Wenvoe
Model 121L/DSB ..	Special high fidelity double sideband model for London area only

Walnut cabinet (as illustrated) .. .. .	£205 - 16 - 0
Mahogany .. .. .	£216 - 3 - 10
Bleached walnut .. .. .	£216 - 3 - 10
Bird's-eye maple .. .. .	£226 - 11 - 10
<i>All inclusive of Purchase Tax</i>	
Remote control unit .. .. .	£3 - 3 - 0 <i>(Purchase Tax free)</i>

### Valves:

R.F. stage .. .. .	EF42	Mullard
Frequency Changer .. .. .	EF42	"
1st I.F. stage .. .. .	EF42	"
2nd I.F. stage .. .. .	EF42	"
Video detector and D.C. restorer .. .. .	EB91	"
Video amplifier .. .. .	EF42	"
Sound I.F. stage .. .. .	EF42	"
Sound detector and interference spotter .. .. .	EB91	"
Cathode follower .. .. .	6L18	Mazda
Sync. separator .. .. .	EB91	Mullard
Sync. amplifier .. .. .	6F14	Mazda
Sync. pulse limiter .. .. .	6L18	"
Interference limiter and frame pulse separator .. .. .	EB91	Mullard
Frame oscillator .. .. .	T41	Mazda
Frame output .. .. .	Pen45	"
Line oscillator .. .. .	T41	"
Line output .. .. .	EL38	Mullard
Tube protection valve .. .. .	6SN7GT	Brimar
Tube protection and focus valve .. .. .	6SN7GT	"
Audio amplifier .. .. .	6L18	Mazda
Audio output .. .. .	6V6GT	Brimar
H.T. rectifier .. .. .	GZ32	Mullard
E.H.T. rectifiers (three) .. .. .	EY51	"
Blocking oscillator .. .. .	EBC33	"
Pulse generator .. .. .	EL38	"

**Safety Device:** Two valves are used to protect the cathode-ray tube in the event of failure of the timebases. Part of one valve is also used to overcome defocussing on highlights caused by a reduction of E.H.T. voltage.

**E.H.T. Supply:** Pulsed R.F. and voltage tripler. 25KV.

**Cathode-ray Tube and Optical System:** 2½" projection tube and Schimdt F62 lens. Picture projected on to plastic screen. Size of picture 12" x 16".

**Controls:** Sound volume and on/off. Brilliance. Focus.

**Sound Output:** 2.5 watts.

**Loudspeaker:** 10" permanent magnet, moving coil. Impedance is 2.8 ohms.

**Cabinet:** Figured walnut, bow-fronted, with doors opening to disclose screen above loudspeaker grille.

**Cabinet Dimensions:** Height 37", width 25½", depth 19".

**Mains Supply:** 200-250 volts A.C. 40/60 cycles/second.

**Mains Consumption:** 220 watts.

**Remote Control Unit:** This special unit, comprising 'Contrast' and 'Focus' controls, incorporated in a neat, well finished case, may be added to the receiver to enable adjustments to be made from the viewer's chair



Cover illustration—Alicia Markova in "The Dying Swan". Page 3 illustration—Ralph Richardson and Peggy Ashcroft in "The Heiress".

# PROJECTION TELEVISION



by **DECCA**



**E.H.T. Unit**  
25 Kc/s. oscillations, pulsed at 1,000 c/s. Voltage tripled to 25 kV..

**Mains Power Chassis**  
Supplies current to vision and sound receiver and E.H.T. unit.

**Cabinet**  
Hand-polished, bow-fronted, walnut. Doors hide screen and controls when not in use.

**45° Reflecting Mirror**  
Situating behind screen. Front surfaced to eliminate distortion and loss of brilliance.

**Viewing Screen**  
Size 16 by 12 inches, made of plastic, with microgrooved surface.

**Loudspeaker**  
10" permanent magnet type.

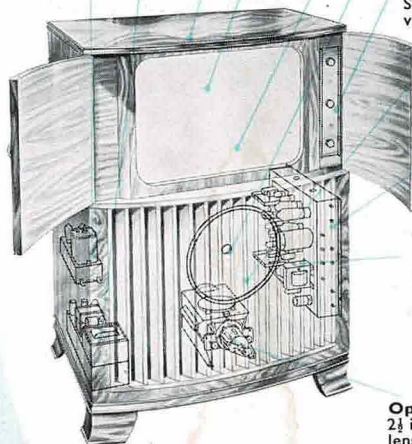
**Television Controls**  
Sound and vision, with provision for remote control.

**Sound Diffusing Grille**  
Even diffusion of sound and elimination of high-frequency beam effects.

**Installation Controls**  
Accessible by removing a portion of the loud-speaker grille.

**Vision and Sound Chassis**  
Superheterodyne sound and vision. Efficient sync. separation. Soft valve timebases of proved design.

**Optical Unit**  
2½ inch tube and Schmidt lens and mirror projection system.



(For full specification please see page 4)

*Pros and cons to help you in your choice of a television receiver.*

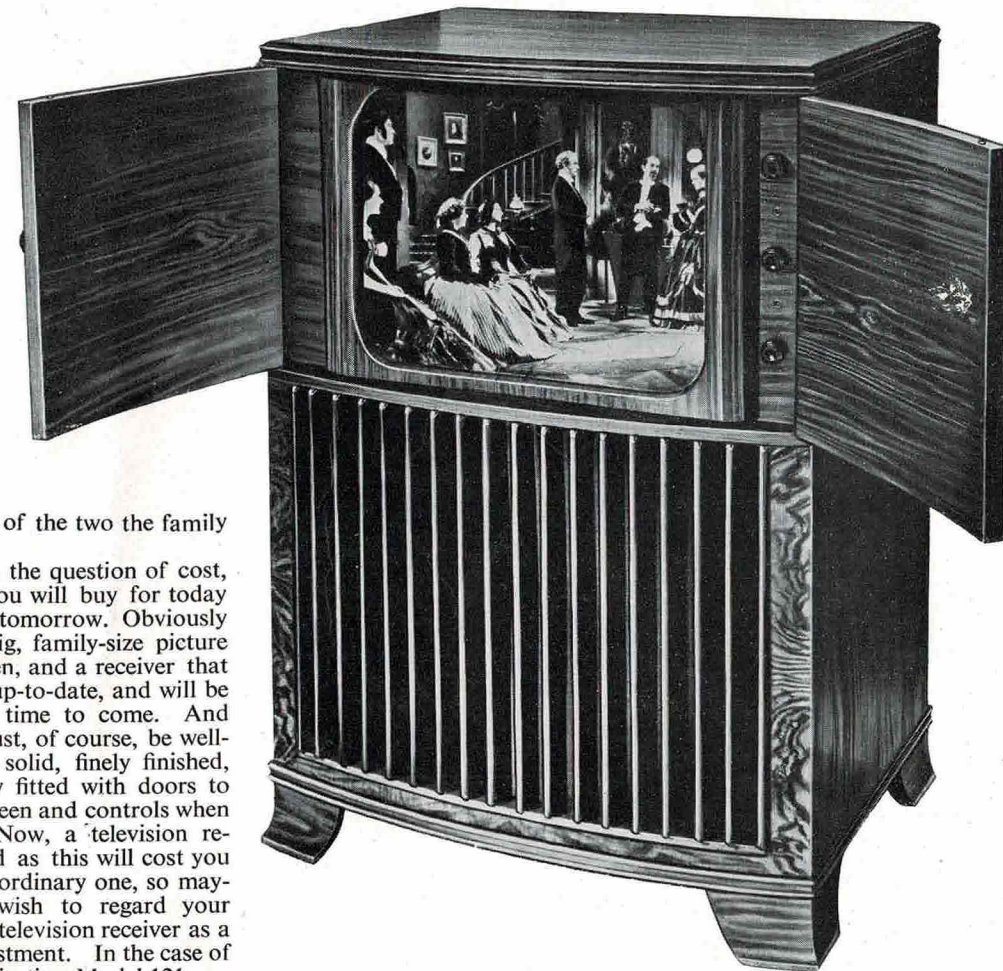
Which will you have, a small picture on a curved screen—the television of yesterday—or a large picture on a flat screen—the television of today and tomorrow?

The small picture and curved screen are inherent to direct viewing, in which the curved face of the cathode-ray tube acts as a viewing screen. Try it, and see whether you and the family *really* like it.

Now for the big 16 by 12-inch picture on a flat screen. This is Decca projection television. It works like this. A small picture of microscopic detail and high light intensity is composed on the face of a *miniature* cathode-ray tube. This picture is magnified by a special large aperture lens system, and by reflection, is projected on to the flat 16 by 12-inch viewing screen, the surface of which is microgrooved to prevent halation and maintain detail. Try *this* system,

and see which of the two the family likes best.

Now there's the question of cost, and whether you will buy for today or—today and tomorrow. Obviously you want a big, family-size picture on a flat screen, and a receiver that is technically up-to-date, and will be so for a long time to come. And the cabinet must, of course, be well-proportioned, solid, finely finished, and preferably fitted with doors to enclose the screen and controls when not in use. Now, a television receiver as good as this will cost you more than an ordinary one, so maybe you will wish to regard your purchase of a television receiver as a long term investment. In the case of the Decca Projection Model 121 you will be fully justified in doing so. Furthermore, there will be no heart-aches in the family because you didn't get the best first time.



Price in standard walnut cabinet £205. 16. 0. incl. P.T.

(For prices of alternative cabinet finishes, please see back page)

... a picture 16 inches wide by 12 inches deep that can be enjoyed in comfort by the whole family ... a rich cinema-like picture, pin-sharp and full of detail, free from halation and with brilliant highlights ... a picture optically projected on to a flat screen that can be viewed for long periods without eyestrain.

This is television as it *should* be ... television at its very best ... as you can have it now ... a brilliant picture with studio quality sound, the result of skilfully combining and turning into practical fact the most up-to-date theories of the world's leading electronic, optical and sound research engineers.

In presentation the Model 121 is a true Decca instrument, designed, built, and finished with great care—a beautiful piece of furniture to grace your home for many years.

MODEL 121

A brilliant 16 by 12-inch picture with studio quality sound and . . . .

... a gracefully proportioned bow-fronted cabinet with doors that hide the screen and controls when they are not in use. The standard cabinet is made of choice walnut with expertly matched grain patterns which, with a hand-polish finish, makes the Decca Television Receiver Model 121 a dignified, handsome piece of furniture. Alternative finishes include Bleached Walnut, Mahogany and Bird's-eye Maple.