

*Luxurious*

*Listening*



**TANNOY**

## DUAL CONCENTRICS



" FIFTEEN "

" TWELVE "

CUT OUT TO SHOW  
INTERIOR DESIGN



### TECHNICAL SPECIFICATION

H.F. VOICE COIL DIAMETER . . . . .

L.F. VOICE COIL DIAMETER . . . . .

IMPEDANCE VIA CROSSOVER NETWORK . . . . .

FLUX DENSITY L.F. GAP . . . . .

FLUX DENSITY H.F. GAP . . . . .

POWER HANDLING CAPACITY . . . . .

POLAR DISTRIBUTION FOR 60° INC. ANGLE . . . . .

INTERMODULATION PRODUCTS . . . . .

BASS RESONANCE . . . . .

CROSSOVER FREQUENCY . . . . .

OVERALL DIAMETER OF FRAME . . . . .

OVERALL DEPTH . . . . .

FIXING HOLES P.C.D. . . . .

WEIGHT (CROSSOVER NETWORK IN A SEPARATE UNIT) . . . . .

FINISH . . . . .

" TWELVE "

2"

2"

18 ohms

10,000 gauss

$B^2L^2 = 6.3 \times 10^{11}$

15,000 gauss

$B^2L^2 = 1.1 \times 10^{11}$

15 watts

-3dB at 10,000 c.p.s.

less than 2%

35 c.p.s.

1,700 c.p.s.

12½"

7½"

11½"

10 lbs.

(crossover 5 lbs.)

Cadmium plate &

Silver hammer

finish

" FIFTEEN "

2"

2"

15 ohms

12,000 gauss

$B^2L^2 = 1.1 \times 10^{11}$

18,000 gauss

$B^2L^2 = 1.39 \times 10^{11}$

25 watts

-4dB at 10,000 c.p.s.

less than 2%

40 c.p.s.

1,000 c.p.s.

15½"

9"

14½"

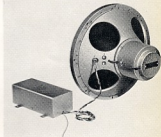
20 lbs. 13 ozs.

(crossover 5 lbs.)

Cadmium plate &

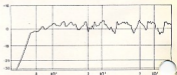
Silver hammer

finish



" FIFTEEN " SHOWING PLUG-IN  
CROSSOVER NETWORK

RESPONSE CURVE



Dual Concentric Loudspeaker Unit inserted in  
convex bass reflex cabinet. (Probe Mic. on axis)

This twin Loudspeaker System consists of a direct radiator low frequency unit mounted concentrically with a horn-loaded high frequency unit. The voice coils of both Loudspeaker Systems are fed through a specially designed crossover network. The frequency response of both units is intrinsically level and the wide frequency range is not obtained by trick effects, such as cone break-up or uncontrolled resonance. The design of the low frequency cone, which forms the final section of the high frequency horn, is such that even distribution of high frequencies is obtained over a wide angle and in order that the low frequency diaphragm shall move as a true piston it is moulded by a special process and the surround is treated with a stable lossy resin to prevent subsidiary resonance. In the design of this Loudspeaker great care has been taken to ensure that the entire system is truly aperiodic which, together with its wide frequency range, results in a standard of reproduction far in advance of that obtained with any other system.

This Unit is the culmination of over 25 years continuous research in the field of high quality transducers and its adoption as a listening standard by Broadcasting and Recording Companies throughout the world is an indication of the supremacy of its performance.

## HOW THE DUAL CONCENTRIC WORKS

Special treatment of cone surround provides correct termination and gives smoother response.

Complete cone assembly may be removed for gap cleaning. Flap and socket connection for crossover facilitates installation.

Die cast cone housing designed for recessing the loudspeaker in the front of a cabinet as well as by the conventional method, on the inside, thereby eliminating frontal cavity resonance. Fixing holes to international standards.

Suspension moulded from plastic impregnated fabric gives high stability and acoustic release.

Whole magnet system concentrically aligned with cone housing which simplifies dismantling and re-assembly if necessary.

Additional built-in centring device to ensure accurate low-frequency gap alignment.

Generous anisotropic magnet material ensures maximum flux density.

Built-in centring device to ensure accurate gap alignment.

Aluminium voice coil conductor for improved high-frequency response.

Concentric H.F. horn, the development of which is completed by the curved L.F. cone.

Phase compensating multiple throat contributes towards smooth and extended high-frequency response.

Corrosion resisting, plastic coated light alloy high-frequency diaphragm.

15 INCH  
DUAL CONCENTRIC

AF-55

## ... and the rest of your home music system ?

As a discriminating listener you will appreciate that a Loudspeaker having the overall performance of the Tannoy Dual Concentric is capable of showing up the minutest imperfections in any other component of your Home Music System. You will have noticed that the inter-modulation products are lower than in the case of many so-called High Fidelity Amplifiers, while the frequency range is such that the effects of so-called supersonic resonances in Phonograph cartridges may easily be detected. So, before deciding on the rest of the components for your Home Music System why not get details of the other products in the Tannoy range designed to complement the performance of the Dual Concentric and above all designed to produce, in your home, the illusion of reality?

### WORLD OPINIONS

*More to the point is the exemplary smoothness and listening comfort the speaker shows, together with what may be called its accuracy, since fidelity has become a deceptive word . . .*

Record and apparatus critic  
for "High Fidelity", U.S.A.

*In a wide variety of test records reproduction was of a very high standard . . . inter-modulation effects are negligible . . . characteristics should be uniformly maintained since the design does not rely on subsidiary resonances.*

"Wireless World"

*. . . It is a superb unit . . . for smoothness and what I call the "human" as distinct from artificial quality of the response, I do not think it is excelled by any combination on the market that I know.*

"The Gramophone" August 1954

*. . . I was convinced that a better loudspeaker had not been produced in this country.*

"Music Trades Review"

*I have been in the high fidelity field for a good number of years and have heard all kinds of speakers, besides owning quite a few of them myself, but never have I heard a speaker that was so startling as your Tannoy 15. Needless to say, I now own one. The only way I can describe it is to use your advertising phrase "Unparalleled Presence": that it is, and more. I am completely satisfied, and that is more than I can say for any speaker I have ever had. I think I have bought some of the best, and some of them costing lots more . . .*

Albert E. Bases,  
Brookside Drive, Feasterville, Pa.

*The initial consignment of twenty units has come to hand and are in excellent condition. Of these, ten have already been sold to the National Broadcasting Services who, we understand, will be placing a further and substantial order in the near future. We are very satisfied with the quality and performance of this high fidelity speaker.*

Green & Cooper,  
Radio Engineers, New Zealand

Manufactured by

**TANNOY PRODUCTS LTD.**

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Telephone: GIPSY HILL 1931.

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