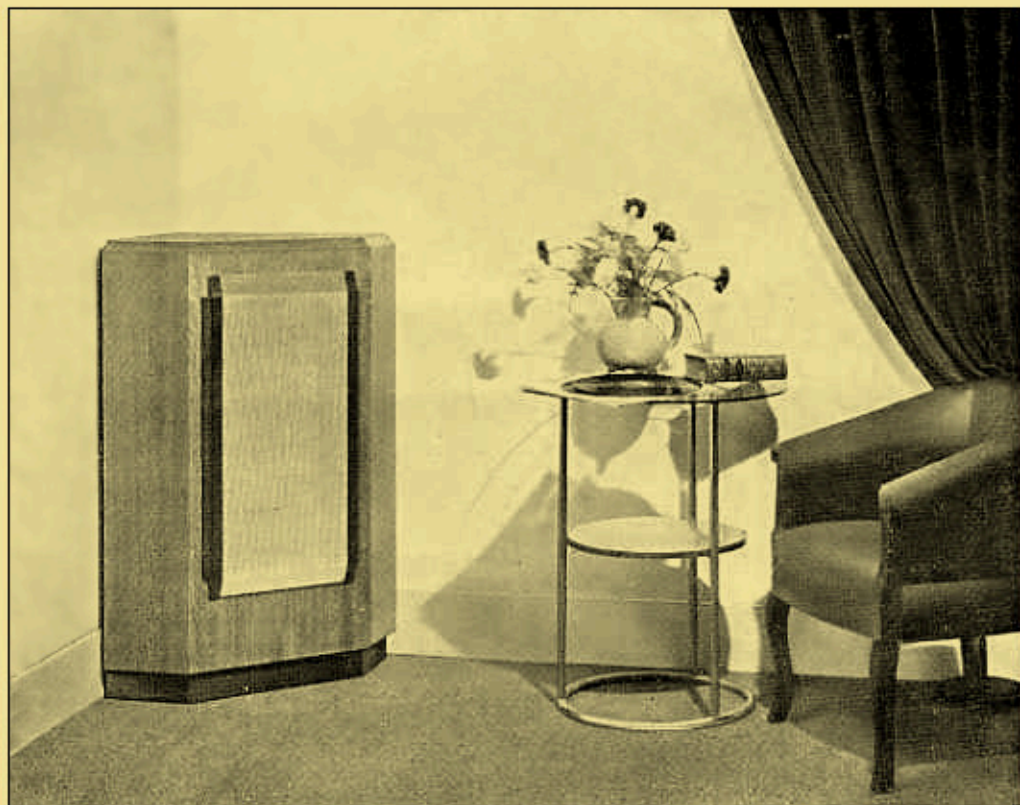


**TANNOY**

# DUAL CONCENTRIC LOUDSPEAKER



## "TANNOY" DUAL CONCENTRIC LOUDSPEAKER SYSTEM.

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 cross-over network. The frequency response of both units is intrinsically level and the wide frequency response is not obtained by trick effects, such as cone break-up or diaphragm 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, the body thickness has been increased and the surround is specially treated to prevent the setting up of subsidiary resonances. 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 result in really outstanding reproduction.

This Loudspeaker unit is available in two forms — a 15" version, capable of handling up to 25 watts which is particularly useful for use with high quality Sound Reinforcement systems and a 12" version capable of handling up to 15 watts, which finds its main application in high quality Phonograph and Radio reproducing systems. An example of a suitable Cabinet design for the latter application is shown above and takes the form of a corner mounting Bass Reflex Cabinet.

There is no doubt that where the input source is of sufficiently high quality, the "TANNOY" Dual Concentric Loudspeaker system is well in advance of any type of Loudspeaker hitherto commercially available.

Manufactured by

**TANNOY PRODUCTS LTD.**

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**BEAM INSTRUMENTS CORPORATION**

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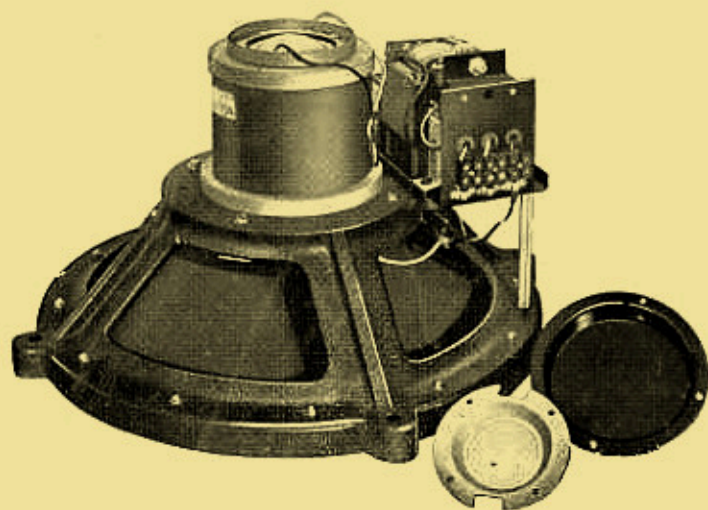
Telephone: LONGACRE, 4-0844. Cables: BEAMINST, NEW YORK.



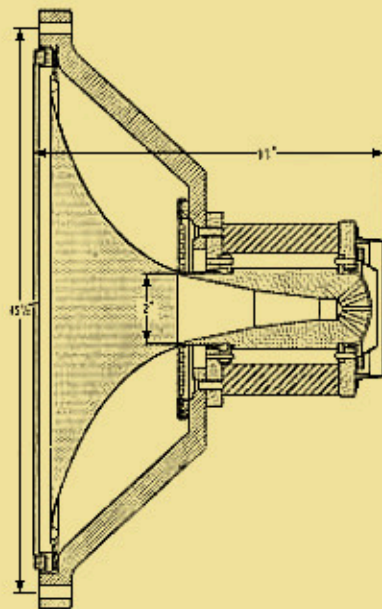




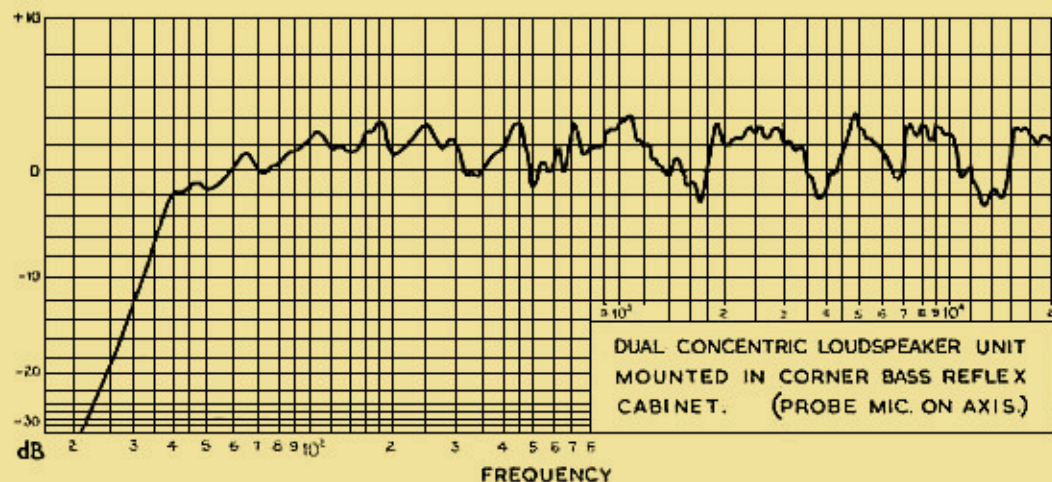
## DUAL CONCENTRIC LOUDSPEAKER SYSTEMS



Unit with rear covers removed showing H.F. Unit and crossover



Cross sectional Diagram showing details of the Dual Concentric System.



The above response curve relates to a 15" dual concentric, the response of a 12" unit is substantially the same in all respects

### TECHNICAL SPECIFICATION.

#### 12" Dual Concentric Loudspeaker.

H.F. Voice coil diameter	2"
L.F. " " "	2"
H.F. " " Impedance	14 ohms. at 3000 c.p.s.
L.F. " " "	18 ohms. at 400 c.p.s.
Flux density L.F. Gap	10,000 gauss, $B \pm L \pm 6.3 \times 10^{14}$
" " H.F. Gap	15,000 gauss, $B \pm L \pm 1.1 \times 10^{14}$
Power handling capacity	15 watts.
Impedance via crossover network	18 ohms.
Polar distribution - 3dB at	10,000 c.p.s. for 60° inc. angle
Intermodulation produces	less than 2 per cent.
Bass resonance	35 c.p.s.
Crossover frequency	1,700 c.p.s.
Overall Diameter of Frame	12 1/2"
Overall Depth	7 1/2"
Fixing Holes p.c.d.	11 1/4"
Weight	10 lbs. (Crossover network on separate chassis.)
Finish	Black Anodised and Cadmium plate

#### 15" Dual Concentric Loudspeaker.

H.F. Voice coil diameter	2"
L.F. " " "	2"
H.F. " " Impedance	12 ohms. at 2000 c.p.s.
L.F. " " "	12 ohms. at 400 c.p.s.
Flux density L.F. Gap	12,000 gauss, $B \pm L \pm 7.7 \times 10^{14}$
" " H.F. Gap	18,000 gauss, $B \pm L \pm 1.39 \times 10^{14}$
Power handling capacity	25 watts peak.
Impedance via crossover network	15 ohms.
Polar distribution - 4dB at	10,000 c.p.s. for 60° inc. angle
Intermodulation produces	less than 2 per cent.
Bass resonance	40 c.p.s.
Crossover frequency	1000 c.p.s.
Overall diameter of Frame	15 1/2"
Overall depth	11"
Fixing Holes p.c.d.	15 1/4"
Weight, including crossover	30 lbs.
Finish	Cadmium plate and stove enamel