The Name for Loudspeakers



GUY R FOUNTAIN MEMORY
'State-of-the-Art' Time Compensated Dual Concentric Loudspeaker System

The Tannoy Guy R Fountain Memory — A sound investment

Guy R Fountain, who founded Tannoy in 1926, was an innovative engineer widely respected for his contribution to the growth of the audio industry. Under his personal direction the Tannoy Dual Concentric Loudspeaker was developed, which quickly became the standard by which others were

The Guy R Fountain Memory Loudspeaker is a fitting tribute to the ideals of our founder. Based on some of his last sketches, this Loudspeaker uses the finest materials and the latest Dual Concentric technology.

Each Guy R Fountain Memory is lovingly constructed by British craftsmen using

selected real walnut veneers and solid walnut edgings, hand finished and polished to a standard normally found only in the finest furniture. The grilles feature an acoustically transparent flecked Oatmeal cloth specially woven for Tannoy by skilled Yorkshire weavers from the finest Swiss yarns.

Removing the front grille, using the ornate scrolled key, reveals the rich glow of the hand-laid cork baffle finish. Set upon the cork is the gold framed 380mm (15") Dual Concentric drive unit, and also the control panel for adjustment of the high frequency response.

We have used the latest in design and

material technologies for the Dual Concentric in this Loudspeaker, together

GUY R. FOUNTAIN 1900-1977

with our unique new Time Compensated crossover. The Guy R Fountain Memory is a phase coherent Loudspeaker System offering superb stereo imagery with exceptionally wide dynamic range.

Our engineers and craftsmen have lavished many hours on producing a system which is a litting tribute to the founder of the Tannoy legend, and also — in the spirit of his ideals provides you with superior sound reproduction from the latest audio technology, while remaining a real pleasure for many years.

## Why Dual Concentric?

The theoretically 'ideal' loudspeaker would have just one single drive unit producing both high and low frequencies.

This is, however, impossible as the reproduction of different frequencies requires drive units of quite different physical and electrical characteristic High frequency reproduction requires a light, fast moving diaphragm; while a much larger unit is required to move the greater volume of air needed for mid and low frequencies.

In a conventional loudspeaker, therefore, two (or more) drivers are used, mounted separately on the front baffle behind the grille. This separation means that the soundwaves from each driver have to travel unequal distances to the listener, causing unnatural time delays in the arrival of high and low frequencies. That delay confuses our hearing mechanism, which is less able to reconstruct a convincing stereo image of the original

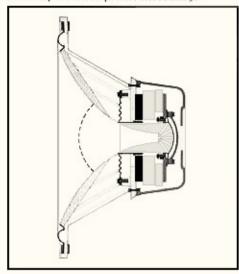
The Tannoy Dual Concentric takes a major step towards the theoretical ideal by actually combining two quite separate and physically different drive units within the same chassis.

High frequencies are reproduced by a compression driver, which is mounted behind the centre of the cone of the mid/low frequency driver. Both drivers are engineered to accept wide ranging power levels, using high temperature coil winding techniques, and are capable of very wide dynamic range reproduction.

The Tannoy Dual Concentric looks, at first glance, like one speaker. A closer look will reveal the throat of the compression driver behind the dust dome in the centre of the bass cone.

The result is that the source of sound at high frequencies and the source of sound at low frequencies are on the same axis. Complementary crossover design, using unique circuitry, aligns the high frequency and low frequency sources at one point on that axis.

The Tannoy Dual Concentric is, therefore, a true single point sound source loudspeaker system which eliminates unnatural time delays, and provides the smooth consistent intensity of sound necessary to create a precise stereo image.



The separate components of the Dual Concentric have been developed to be the best of their type available.

Our compression driver is a massive device in comparison with conventional tweeters, capable of accepting very high power inputs and converting significantly more of that power into pure sound. The horn throat and phase compensating array is machined from solid steel to eliminate resonance. The flare of the horn throat is continued by the bass cone, ensuring a smooth, distortion free sound at the crossover point.

Our special Barium Ferrite magnet has a much greater mass than most speaker magnets, and utilises a unique magnetic shunt to ensure the best acoustic balance of high and low frequencies.

The bass driver uses an individually treated cone with specially damped suspension to give controlled bass response without colouration.

The Complementary Crossover Our crossover networks are individually designed to complement each model of loudspeaker and provide a fully 'phase coherent' system, using our unique circuitry. This gives a single point sound source, particularly at frequencies where the human ear derives the information necessary to create a precise stereo image.

All of our crossover components are the finest available and each is mechanically and thermally stable, enabling full advantage to be taken of the Dual Concentric's high power handling without the need for signal degrading 'protection' devices.

To enable you to adjust the high frequency response of the system to suit your listening environment, we have included two controls in the crossover. An energy control to increase or decrease the output of the compression driver over the frequencies from 1kHz to 20kHz, and a roll-off control which alters the output of frequencies above 5kHz.

The Tannoy Dual Concentric System is not the cheapest way to make a loudspeaker; but we do it because we know it is the best way to give you superior stereo sound. The elimination of unnatural time delay distortion provides superb stereo imagery. Wide sound dispersion enables you to appreciate that image over a wider area than with conventional loudspeakers. Wide dynamic range gives you the highs and lows of a musical performance, and is essential to realise the full benelit of today's high quality analogue and digital recordings as well as tomorrow's laser technology.

## GUY R FOUNTAIN MEMORY — Technical specification

Recommended amplifier power (RMS per channel into 80)

Peak power handling Impedance

Sensitivity (1W @ 1m)

Frequency response (±3dB)

Phase response Time compensation

Dispersion (including angle @ -6dB points @

10kHz) Crossover type

Crossover frequency Crossover controls

Driver type

50-200W

500W 80 nominal 5.5Ω minimum 92dB (anechoic) 95dB (domestic) 29Hz-20kHz

80Hz-10kHz ± 12°

Better than ± 10µsec. 80Hz-10kHz 90° horizontal & vertical

Passive, low loss, time compensated type 1015

1kHz

Shelving: ±6dB over 1kHz-20kHz Slope: +3dB to -6dB per octave 5kHz-20kHz

Dual Concentric, high compliance

type 3839/M Diameter 380mm (15\*)

Bass loading

Cabinet construction

Cabinet internal volume Cabinet dimensions ( $h \times w \times d$ )

Cabinet weight

Less than 2% 3rd harmonic at half power 80Hz-20kHz Less than 0.5% 3rd harmonic for

90dB 40Hz-20kHz Less than 2% 3rd harmonic for 110dB

80Hz-20kHz Less than 5% 3rd harmonic for 113dB

80Hz-20kHz

Quadruple ducted port Solid wood and 25mm particle board. Rigid cross-bracing and heavy

internal damping. Real walnut veneers

Finish

Grille

Solid walnut edgings Baffle finished in hand laid cork

Specially woven acoustically transparent cloth over wood frame Centre grille detachable with lock

and key Side grilles fixed 220 litres

1100 × 800 × 480 mm (Packed: 1280 × 830 × 580mm)

62kg (Packed: 84kg)

\* The peak power capability of all Tannoy Loudspeakers will allow higher amplifier powers to be used with wide dynamic range material. Care must be taken, however, to avoid conditions such as switch-on surges and amplifier overloading or 'clipping' which may result in momentary peaks of power greatly in excess of the specified ratings.

Energy

Roll-off

Due to our policy of continuous improvement, we reserve the right to change specifications without notice.

All Tannoy products are designed and manufactured in Great Britain by:

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