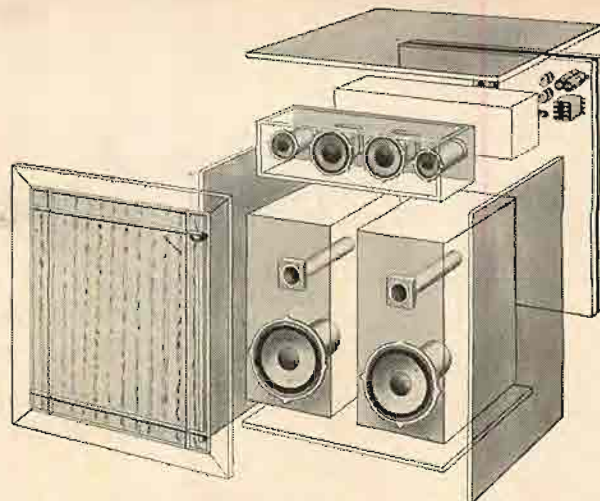


...a dual 3-way speaker system

6 speakers—2 bass, 2 mid-range, 2 treble...superbly matched and integrated with a magnificent sand-filled enclosure



THE W90 is destined to restore the legendary sound of former years...the sound of the great Wharfedale systems used by G. A. Briggs in his concert demonstrations at Carnegie Hall, Royal Festival Hall and others throughout the Western world. The Wharfedale systems he used to recreate the full symphony orchestra, single instruments from triangle to organ, and the voice...all at correct volume, and without coloration or distortion...were compared by the thousands in his audiences to simultaneous live performances on the same stages. Imperfect as such experiments had to be, the natural, realistic quality achieved

by these homely but wonderful Wharfedale speaker systems accounts for the unassailable loyalty of those who heard Mr. Briggs' concert demonstrations or heard about them. And as musically-oriented people have grown more sophisticated in listening to stereo, there has been an increasing demand for the restoration of the full authority of these large, earlier Wharfedales. Unfortunately, this kind of sound, up to the present, has been the exclusive province of systems too cumbersome for most living rooms, especially when used in pairs for stereo. Now, benefiting from the advancements developed for

its compact Achromatic series, Wharfedale has successfully designed a new size and format. It is a special sand-filled system, proportioned specifically to accommodate the components required today to accomplish this ambitious purpose. Measurements are $32\frac{1}{4}'' \times 27\frac{3}{4}'' \times 13\frac{1}{8}''$.

The new W90, therefore, is neither a compact, nor is it a large speaker system. It is a new and highly versatile size, designed from the sound out...with absolute insistence upon the results desired, yet with an eye to the latest decorative trends in stereo arrangement.

All six speakers incorporate certain recent refinements which have made possible the task of creating the W90 system. A brief description will clarify what we mean:

The chassis (baskets) are exceptionally heavy and manufactured by casting. The purpose is to preserve absolute rigidity, maintaining the critical relationship between the moving voice coil and the fixed magnet. The stamped baskets found in ordinary loudspeakers are also designed to be rigid. However, this rigidity is often lost as soon as the speaker is mounted firmly against an inexact wooden front baffle. Some speaker designers have even eliminated the basket, weakening the entire speaker structure. Wharfedale baskets are of cast metal. They hold their shape perfectly in mounting, and are strong enough to permit sufficient openings to maintain absolutely correct airflowing, essential for the full response of the speaker.



The Cone Surround is an exclusive rolled-rim design, the latest and most effective form of the traditional Wharfedale soft suspension. Earlier surrounds (porous foam or cloth) provided such superior bass damping that they became renowned as an outstanding physical characteristic of Wharfedale speakers. Now, more than ever before, the Wharfedale cone is capable of the long excursions required for true bass energy in a sophisticated tuned duct enclosure. The cone material is special...compounded of long fibred wood (traditional to the North of England home of these speakers) and soft pulp! It achieves superior results from the start and its natural resilience assures continuing perfection over the years.



The Magnets are truly impressive, individually and totally. Because of its material, and the special design of the magnetic gap, each provides higher total flux in the gap field than has been true of the magnets in any prior speaker system. The six magnets together make the W90 a "high efficiency" speaker, achieving maximum performance at low amplifier power. All-too-many popular speaker systems are starved for power, depending upon exaggerated amounts of amplifier wattage. In the W90, therefore, the all-important transient bass response is excellent, even at low volume. This clean low end, at reasonable listening levels, is a major reason why all Wharfedales are so pleasant to "live with."

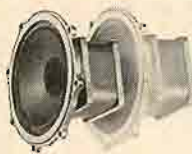


With its six speakers, the W90 is actually a dual 3-way system with all units designed for each other and crossover settings calibrated for undistorted response throughout the audio spectrum. The support effect of the tandem speaker systems results in a sound of exceptional authority, yet in balance over the entire range.

LOW RANGE. Two $12\frac{1}{2}''$ low frequency drivers handle the sound from 20 to 1,500 cycles. The listener can expect to enjoy the true, fundamental bass notes, so often masked. The two drivers total a cone area of 94 square inches...thus the W90 tandem idea yields the same result as a single low frequency driver of such massive size and weight as to be impractical in the home.



MID-RANGE. Two $5\frac{1}{4}''$ mid-range speakers cover the relatively narrow but vital band of 1,500 to 6,000 cycles. The listener will be startled, for example, by the clarity of the baritone voice and the exceptional resolution of most solo instruments, permitted to stand in correct perspective. The handling of this "fill" range in the W90 is the recognizable key to its satisfying full-throated sound.



TREBLE. Two 3" treble speakers are the well-established Super 3's, much admired for their ability to present the clear treble without stridency...making them eminently listenable, unusual for tweeters. This is no accident. It is the result of cone-type rather than horn-type construction, and refinements such as low-mass aluminum voice coils ultrasonically tinned, powered by magnets so large that they are seldom found even in speakers four times the diameter!



THE W90 is the latest of the Achromatic speaker systems. The literal meaning of "achromatic" is: "Pure sound, uncolored by extraneous modulations." Such modulations, common even in luxury speaker systems, tend to alter the natural sound of music. The W90 enclosure has been designed to preserve the integrity of the speakers' performance, through certain constructional features. Chief characteristic of the Achromatic construction is the sand-filled technique, which consists of packing white sand densely between layers of hardwood. This creates an inert mass, incapable of resonating no matter how deep or strong the bass backwave projected against it. This



technique, exclusive to Wharfedale, is the result of years of development by G. A. Briggs. While it costs considerably more than standard construction, it has proven so effective in preventing bass distortion that all Wharfedale Achromatic systems incorporate it. Each woofer is mounted in an individual tuned chamber for its own maximum effect, and isolated from the mid-range and tweeter arrays. Therefore, mechanical coupling, so disastrous in ordinary systems, is eliminated. The high and mid-range speakers are mounted from the rear, isolated from the face of the cabinet with front free-floating. This important feature helps to eliminate phase distortion. As a final measure, to insure compatibility with the acoustics of the room, the W90 system incorporates a full control panel. Each range of speakers may be balanced

and adjusted to the ear of the listener, the requirements of the particular listening area and the other components in the music system.

DECOR. The Wharfedale W90 is housed in a meticulously crafted cabinet built to meet every requirement of perfection in sound...yet it will fit with ease into the living room, and is elegant enough to join the most distinctive furnishings. Its acoustic design adds versatility...permitting horizontal or vertical use as desired. The Wharfedale Universal Mounting Base makes it a superb free-standing unit. In oiled or polished Walnut hardwood, \$259.50. Utility model in sanded birch hardwood, without curved molding or dividers, \$244.50. Universal mounting base to match \$9.95.

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