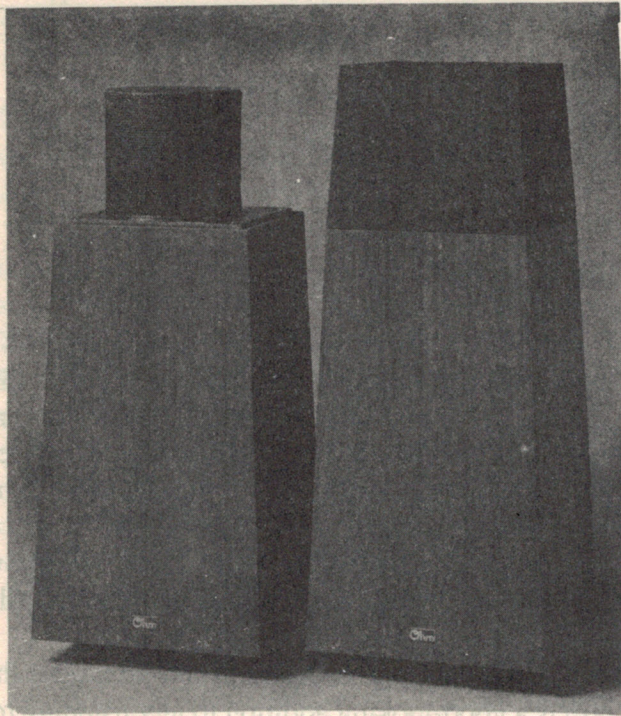


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OHM ACOUSTICS "WALSH" 4-XO LOUDSPEAKER



by: John F. Tamburo

Specifications:

Frequency Response: 32 Hz to 22 kHz

Efficiency (1 watt/meter): 90dB, SPL

Size: 36" H x 13 1/2" W x 13 1/2" D, tapering
to 10 1/2" W x 10 1/2" D at the top

Weight: 40 lb. each.

Serial Numbers: 20373 & 20374

Price: \$1,995.00 per pair.

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Ohm Acoustics has been the sole progenitor and promoter of the speaker design philosophy of the late Lincoln Walsh. These so-called "Walsh speakers" are (in theory) a form of time-aligned omnidirectional transducer. Instead of using a cone speaker in a traditional "piston" fashion to drive air by its on-axis motion, Walsh designed a mathematically sloped cone which was to have driven a CLOSED cabinet (or infinite baffle) and to have generated sound along the surface of the cone.

Since the driver would be counter-pressured at all times, Walsh theorized that different areas of the driver cone (faced directly DOWN) would radiate

different frequencies and the higher cone positions (near the driver magnets) would handle the higher frequencies.

The Ohm Walsh F was the first successful commercial implementation of the Walsh design philosophy. It was marked by an astounding soundstage, low output levels, rolled-off upper frequencies, and a distributing tendency toward

self-destruction at high listening levels or in strong transients.

The old saying in the audiophile world was, "You can drive a Walsh speaker loud enough to listen to with 100 watts — and it blows up at 90!"

**"I rate the
Ohm Walsh 4-XO
a 'Must Buy.'**

—JFT"

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Ohm has been fighting that image for years, and recently with success.

The Walsh 4-XO (eXtra Output) represents the second from the top of Ohm's line at \$1995/pair. The \$4800 Walsh 5-XO is a mammoth system, almost twice the size (in area) of the 4-XO.

However, the size of this system should NOT cause one to think that it is either bass-shy or inaccurate. Its bass reaches down to a respectable 32 Hz — nearly the same level of the \$7000 Apogee Diva or the discontinued \$6500 Infinity RS-1B.

The Walsh 4-XO makes use of the traditional Walsh driver PLUS a tweeter in each driver aimed 45 degrees inward from each speaker's center axis. For that reason, THE AUDIOPHILE-FILE strongly recommends making an equilateral triangle with the speakers at the base and the main listening position at its apex. With respect to the rest of the 4-XO's design, it appears much as the other Ohm Walsh

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speakers have — a trapezoidal rectangular cube. The driver fits over a 4th-order Butterworth port in the wooden base, and is connected to the 5-way binding posts in said base by an industrial connector fitted to Monster Cable OEM wire.

The speakers come packaged separately, with each base in its own box and a third box holding the Walsh-drivers and the drop-on-top grilles. One need

only unpack the components, hook a driver to a cabinet, screw it down (with provided knurled nuts) and pop the grille on top. The speaker is then ready-to-go.

The 4-XO is a handsome-looking speaker, featuring a hand-rubbed wood veneer finish rivaling

" Ohm has FINALLY tackled the efficiency problems of the Walsh driver. "

that of the expensive Infinity's and B&W's and almost in the same league as the Snells. Each speaker is on CASTERS (UGH!), which make relocation simple but stink sonically. I therefore devised a platform assembly which boosted the 4-XOs a mere 1/8 inch off the floor onto Tiptoes, thus giving proper coupling to the floor and still allowing my carpet to damp the casters so that they'd not rattle.

Even with my impromptu modification, the 4-XO is a good-looking addition to any listening room. I was indeed duly impressed.

After the set-up, I started sonic testing. The equipment used for testing included Monster M-Series cables throughout, ARC D-120 and Superphon DM-220 MK II power amps, H/K Citation 21, ARC SP-10 Mk II and Superphon Revelation II preamps, Mod Squad 650 and C-A-L Tercet CD players, H/K Citation 23 Tuner, Akai GX-630D 10" reel deck (as modified by JFT), Nakamichi Dragon and H/K CD491 cassette decks, Luxman PD-300 vacuum turntable, Dennesen air-bearing tonearm, Grado Signature 7 and Koetsu Rosewood Signature cartridges.

The first test auditions using the Mod Squad CD player and pop music were impressive, to say the least. The material had a natural timbre which I had

heard on no system except TJK's (whose system is tuned on Pink Floyd). Soundstaging was nearly perfect, especially on master tapes recorded by yours truly.

On pop materials, the bass was deep and quick, with an image quality that seemed to integrate more with the rest of the musical signal when compared to other traditional dynamic systems. Its bass/midbass integration is surpassed only by Infinity 9-Kappa and IRS, the Duntechs and the Apogeos.

Moving up the spectrum, the 4-XO had a warm midbass and midrange, and an ever-so-slight leanness in the upper mids. This made the transition between Walsh-driver and tweeter (used to reinforce the rolled-off treble output of the Walsh driver) noticeable, but only slightly so (and in simple musical situations). The treble was airy and natural, a BIG surprise to any Walsh F listener. It was NOT harsh at all, and was not wispy or zippy in the extremes of the treble range.

Switching to organ music, I then beheld the bloom of the 4-XO as a serious audiophile speaker system. The spectrals held onto the same characteristics noted on the pop materials. This combined with that soundstage (one of the best ever

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on ANY system), made listening to the 4-XO a real joy.

One feature of the 4-XO that was startling was its impressive accuracy in the recreation of vocals, especially female vocals. This feature always catches

my ear, since so few systems can faithfully render a woman's voice properly, either overemphasizing a woman's natural singing sibilants or by overemphasizing sounds from her diaphragm.

The 4-XO could also be driven to comfortable

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listening levels with pop, organ AND symphonic works WITHOUT activating any of the numerous safety features Ohm has installed to ensure you won't be picking Walsh-driver shrapnel out of your face.

In fact, I never drove the speakers to the point of activating the safety features! This indicated to me (considering the LOUD levels at which I at times tested this speaker) that Ohm has FINALLY tackled the efficiency problems of the Walsh driver.

In symphonic works at concert levels I detected the only spectral anomaly with the 4-XO. It has a small midrange bloom smack in the center of the midrange. This can, in certain symphonic selections, over-bloom the sound of a French horn or a Huntinghorn, especially in FORTISSIMO solos. However, this was the only problem which manifested itself with the spectrals, and was easily controlled with judicious usage of the volume control on my preamp.

Dynamic range portrayals were a particular strong point of the 4-XO. Soft passages were rendered with a heartwarming faithfulness, as were the loud passages. Reproduction of transients was

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good. Not as good as an Apogee, but better than most all dynamics.

Then there was the IMAGING. Ohm Walsh speakers have long been renowned for a palpable, TOUCHABLE, deep, wide and realistic soundstage. The 4-XO is no exception, rendering every aspect of the soundstage with stunning accuracy. Its soundstage depth was, without exaggeration, excellent; the width was also noticeably better than any close competition. Image placement was rocksolid and accurate from listening positions in a range as wide as the spacing between the speakers.

This speaker is, without a doubt, THE most group-friendly speaker I have ever auditioned, bar none. The omnidirectional nature of this speaker works to its advantage; so that the soundstage presentation of the 4-XO remains constant over a large area.

As I experimented with positions for the 4-XO in my room, I found them working best 8 feet apart and about 8 feet ahead of my listening position. I kept them 2 1/2 feet away from rear and side walls, and loaded the corners with ASC Tube Traps in the Tx6 configuration, set for maximum room absorption. I felt the bass to be muddied and tubby with untreated room corners. Plants in the room corners seemed to produce the same effect as tube

traps, but with less efficiency and a slight soundstage depth reduction.

I found my interest in soundstaging renewed by listening to the 4-XO. With its spectral prowess setting it apart from its predecessors, the 4-XO thrusts Ohm Acoustics into the big-time audiophile world with a winner.

This speaker is sonically invisible at most times, and only a rare few times was I able to distinguish the output of a speaker as opposed to the music field as a whole.

If it were not for that midrange bloom at high levels, I'd see clear to give the Ohm Walsh 4-XO the KILL or DIE to Buy* award. Its outstanding performance in all other areas; however, earns it a well-deserved place in the top

echelons of THE AUDIOPHILE-FILE'S recommended components list.

I rate the Ohm Walsh 4-XO a "Must Buy." ** —JFT

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* *Earned by only one speaker to date, the \$65,000 WAMM, Wilson Audio Modular Monitor.*

** *Other prestigious recipients of this award include: Apogee Duetta II, Snell Type A and the Martin Logan Monolith.*

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