

John Bowers

Silver Signature

Produced in

Celebration of

the Working Life

of **John Bowers**

A quarter of a century ago John Bowers created a new kind of audio company.

Pure Silver

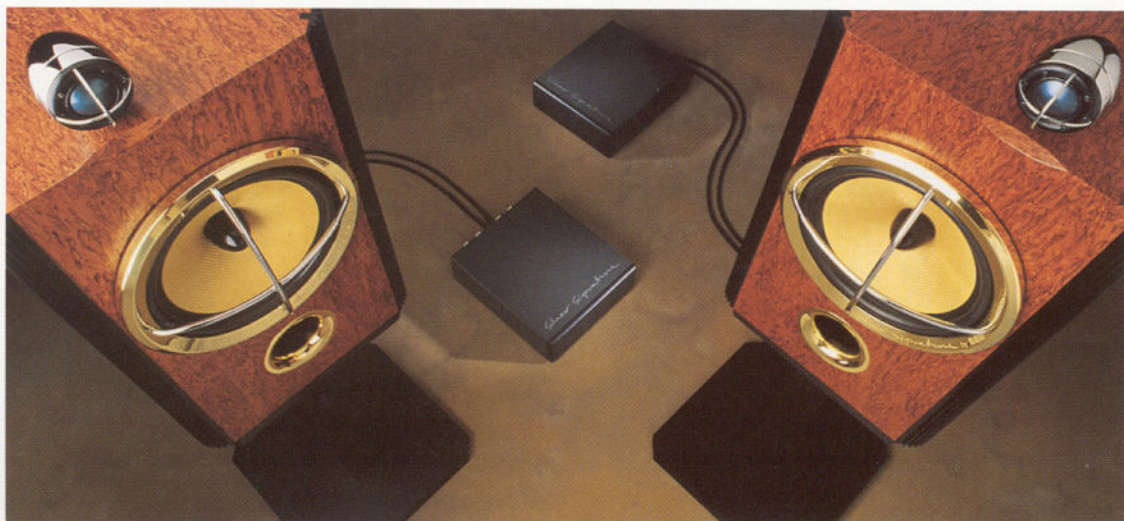
A company motivated by musical rather than commercial ambition. A company born out of a dissatisfaction with the means of reproducing recorded sound then available.

B&W Loudspeakers was going to be a company that didn't compromise.

Its singular aim — the pursuit of perfect sound reproduction.

Its means — a succession of brilliantly innovative loudspeakers that musicians and audiophiles alike would feel comfortable with.

It is appropriate, therefore, on the 25th anniversary of the birth of a company which always rejected half measures, that a loudspeaker should emerge that represents the ultimate statement in high quality acoustic design.



The use of high grade silver to replace all the copper inside the system is no mere cosmetic device. However fitting it might be in this case.

Research and the occasion came together in a timely convergence.

Studies made into the use of different metals for loudspeaker wire and cabling indicated that pure silver is the optimum conductor for high quality audio reproduction.

Precious Mettle

So, for the first time silver has been used for the Signature cable, the internal wiring of the speaker system and the crossover, as well as the crossover and driver leads, the voice coils and the extensive windings in the crossover components.

The cable has pure silver pin lugs. Significantly, even the binding terminals have a pure silver contact area and connecting core.

Precious metal for a precious sound.



John Bowers by Snowdon

The Silver Signature is a celebration of the art of loudspeaker design. Both its sound and appearance will give its owner cause for pride.

A Celebration of Sound

This compact two-way system has been designed to provide the necessary accuracy and transparency to do justice to the finest amplification and source material currently available. Incorporating every proven advance in loudspeaker technology, from crossover to speaker stand, the Silver Signature can justifiably be said to be the outstanding loudspeaker of its class in the World today.

A cursory glance reveals an apparently conventional compact stand-mounted loudspeaker.

Closer inspection reveals a number of novel features.

The high power bass-midrange driver has been specially developed using a new Kevlar cone shape, whilst the tweeter is left stark and bare with a new diaphragm mounting plate positioned off-centre for better acoustic performance.

The grilles provide a stylish departure from conventional design. Simple cross-wires intersect to protect and contribute minimum acoustic interference. Surrounding the grille, the trim ring has the Silver Signature name engraved, adding to its desirability. Significantly, the crossover is housed in a separate box close to the amplifier to eliminate electromagnetic and vibrational

interference. The low frequency and high frequency sections are independent throughout with customised Silver Signature cable used to link the crossover to the chosen amplifier channel. Leaving nothing to chance, speaker leads of similar construction will be available to provide consistency of quality throughout the system.

Even the speaker stand has been included in the design equation. Pre-Cambrian Welsh slate has been used to build Signature stands imbued with unique properties of inertial mass, stiffness and acoustic damping. The Silver Signature proves that appearances can be deceptive. This is no ordinary loudspeaker. Expect no ordinary sound.



MSRP \$1,299.99
Silver Signature

Silver Signature

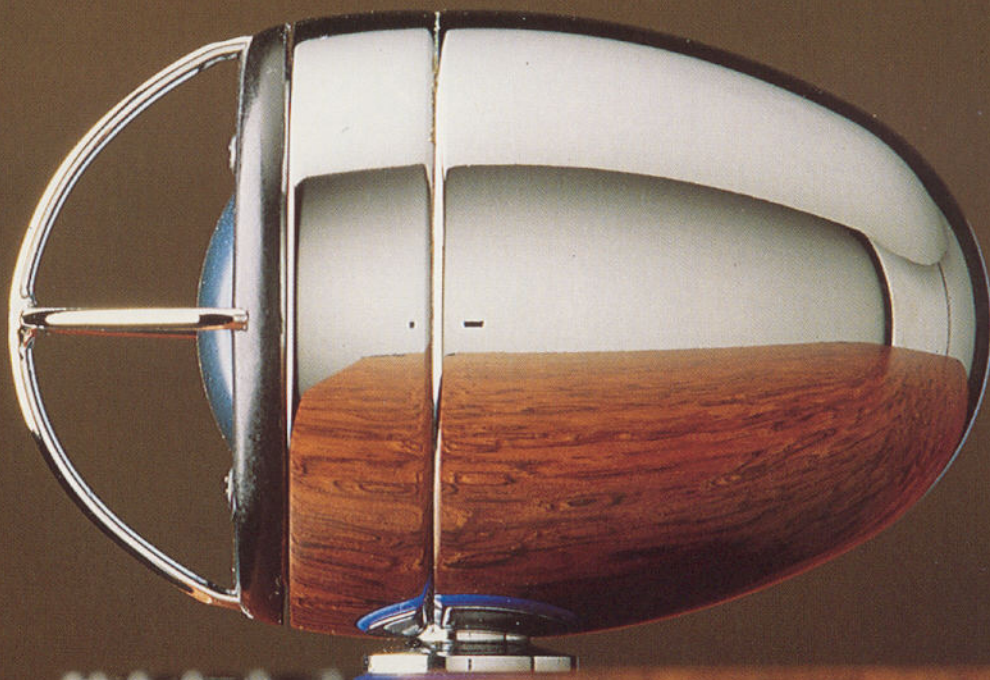
The engineering brief for the Silver Signature might have intimidated less able manufacturers.

Setting the Brief

For the redoubtable B&W Research team the following objectives were set:

- Achieve maximum signal transparency and neutrality in the cabling and electrical interfacing.
- Ensure minimum acoustic readout from the enclosure, housings, driver chassis and stand.
- Provide optimum room-matched location and support for enclosures.
- Isolate the crossover unit from the loudspeaker section.
- Allow for bi-wiring throughout.
- Bring about the optimum combination of bass dynamics and neutral mid-range from a high performance Kevlar bass/mid-range drive unit.
- Incorporate a minimal diffraction, wide directivity treble range. Its purity and neutrality to be secured by a dome operating as a theoretically perfect piston over the whole audible working range.





Patently, no easy task. However, one made easier by having some of the finest acoustic engineering talent in the world assembled under one roof at B&W's research centre at Steyning.

Meeting the Brief

The Silver Signature design brief placed great emphasis on the Company's advanced capability in drive unit design and manufacture.

Useful tools like computer-aided theoretical modelling of the working elements of the loudspeaker and laser holography were employed to reveal subtle aspects of driver performance in real time.

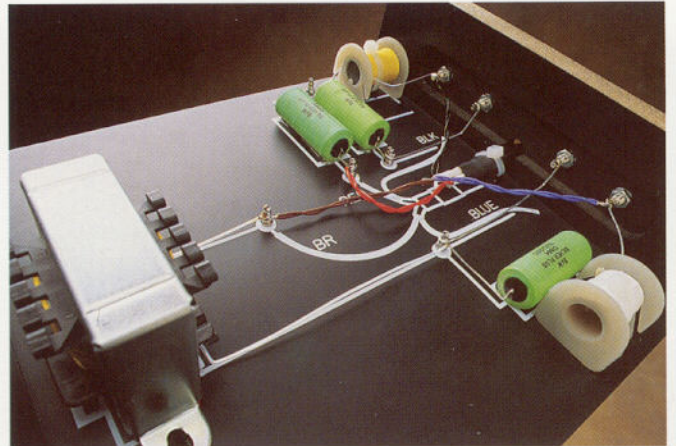
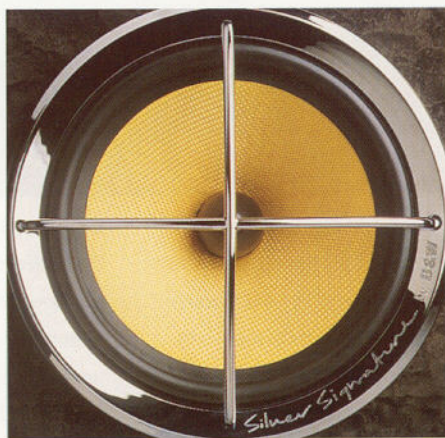
In classic B&W style the targets for driver performance were benchmarked at the outset.

As a result, two new Signature driver units emerged, verging closer than ever before on perfection.

Despite its moderate size, the Silver Signature possesses a wide frequency range — 35Hz to 22kHz in typical room conditions. The Signature's pedigree is evident from the fact that it is critically toleranced to a $\pm 1.5\text{dB}$ maximum deviation in the vital 100Hz to 15kHz range, (measured using aurally weighted one-third octave band analysis).

Finely Balanced

The speaker, therefore, offers the optimum balance between the fundamental factors of bandwidth, sensitivity, dynamic range and amplifier loading. Nominally rated at 8 ohms, the Signature is compatible with a wide spectrum of amplification - vacuum tube and solid state. Depending on room size, amplifier per channel power ratings from 20 watts continuous will prove suitable, reaching up to a maximum input of 150 watts of unclipped, undistorted peak music programme.



In the snapshot of the present, it's gratifying to know that the Silver Signature stands at the forefront of audio design.

By making it modular with potential for future refinement, we have ensured that the Signature will remain there.

Today, the presentation is that of a passive bi-wired compact system.

Growth Potential

Tomorrow, who knows?

Due to its modular construction, this arrangement may be augmented by a high performance electronic crossover to produce an active system that may be driven by any suitable high quality power amplifiers.

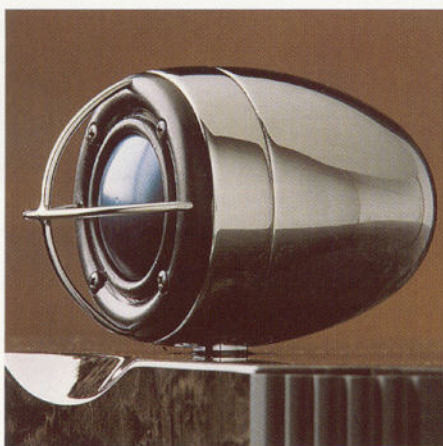
Potential also exists for passive and active sub woofer systems to reinforce the low-frequency power handling and range. (Although these should be unnecessary with normal domestic use of the Signature.)

Nominally 170mm (7in) in diameter, the new Kevlar bass/mid-range driver developed by B&W's research department has become something of an advertisement for the company. It has a bullet-shaped hard dust cap, an almost straight-sided cone in Kevlar woven fibre and is built on a robust die cast alloy frame. The voice coil and lead-out wire has been fashioned in pure silver.

Driven by Higher Standards

The Matrix 801-derived tweeter has been given a new diaphragm mounting plate which does not incorporate the phasing ring. Built in minimal diffraction bullet form, the tweeter is positioned slightly off-centre in order to optimise acoustic performance and is acoustically isolated from cabinet vibrations by an energy absorbent mounting. The pure piston diaphragm is made of lightly anodised (5 microns) aluminium alloy, whilst the coil and lead-outs are in silver.

Bass reflex loading with a high velocity ducted port provides the best blend of power handling, low distortion and bass extension.

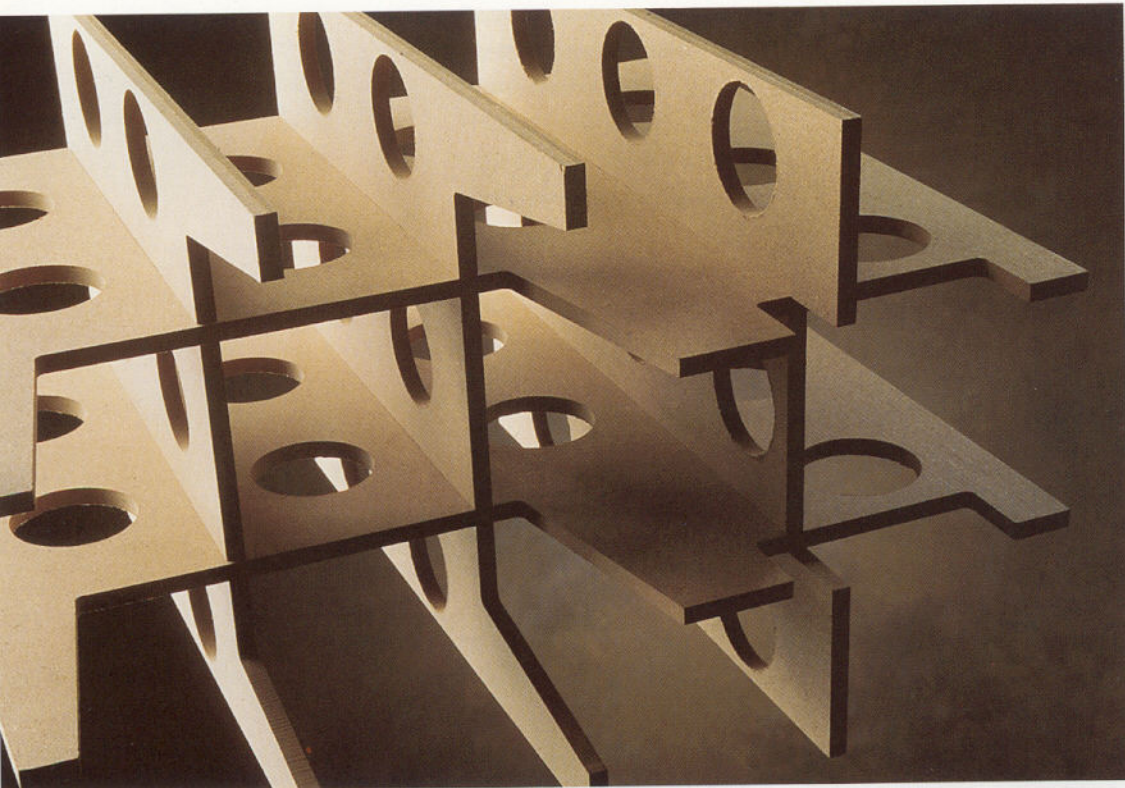


In the Signature's modular design, the crossover unit is a separate entity, placed at a remote location from the speaker, adjacent to the amplifier. Avoiding electromagnetic and vibrational influences in the process. Silver Signature cable is used to link the crossover to the chosen amplifier channel. The cable construction consists of four wires, each containing two 0.7mm (1/2in) solid silver conductors, insulated with PTFE.

The Crossover Departure

The cable, as you would expect, has been selected and then fine tuned to bring out the best performance from the Signature passive crossover.





Whilst the eye may be drawn towards the use of silver, don't imagine the standard B&W refinements are missing elsewhere. The company's revolutionary Matrix cabinet construction results in a structure of extreme rigidity, supporting the cabinet walls over the speaker's entire surface, helping the unit to behave like a solid block of material. Wall bending resonances are greatly reduced, a high degree of damping ensues and the Matrix honeycomb itself prevents in-band acoustic standing waves from forming over the speaker's working frequency range. The resonances occur instead within each of the tiny anechoic chambers where sound-absorbing foam easily deals with the resultant higher frequency standing waves. The use of another B&W innovation, Kevlar in the bass/mid-range driver cone is maintained, allowing a remarkable linear frequency response and freedom from delayed resonances. Ferrofluid cooling in the HF unit ensures minimal signal compression and an assurance that the high temperature silver voice coil will never overheat during normal use.

Silver and the B&W Standard

As regular B&W patrons have come to expect, the Silver Signature's drive units are carefully matched in terms of both sensitivity and smoothness of response.



A free space design, the Signature is intended to reproduce recorded stereo sound stages with the finest possible perceived standards of width, height, depth and specific focus. A balanced location is necessary in the listening room, with the speaker placed away from the rear and side walls on the special Signature stands.

As a guide, try spacing the speakers 0.8m from the rear wall and 1m from the side walls.

Fine adjustment in conjunction with a choice of a symmetrical listening position will pay dividends.

The objective is the most even extended bass combined with the most accurate stereo imaging. Signature stands are fabricated from pre-Cambrian Welsh slate chosen for its exceptional dense grain structure produced by the extreme compression undergone during its formation in the Earth's crust.

Its quality permits a perfect finish, together with a state of the art

combination of inertial mass, rigidity and acoustic damping. A locking system prevents the Silver Signature from being accidentally detached from the stand platform.

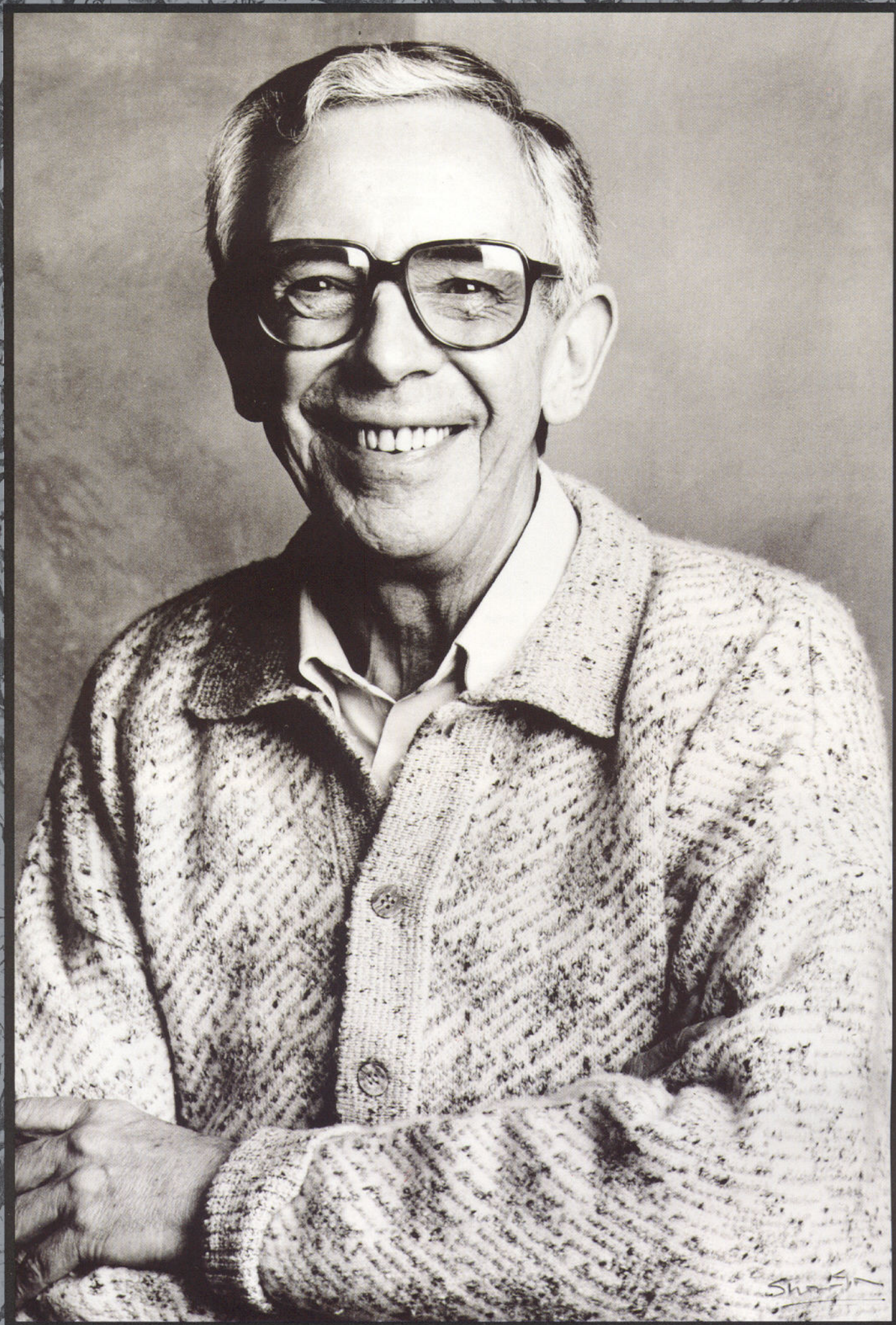
The base is critically coupled to the room floor by the means of adjustable, levelling spikes of hardened steel. For ceramic or hardwood floors, hard polymer coupling cones are supplied to avoid damage.

Taking a Stand

The stand is an integral part of the system's capacity to carry sound and has been specially designed to offer the Silver Signature a highly stable inert platform from which it will generate stereo illusions which you will find hard to believe.

Even with the evidence of your own ears.





My friend, John Bowers, was many things to many people. To Violette Szabo V.C., heroine of British Special Operations Executive in World War Two, he was the voice of freedom that she spoke to covertly by radio from enemy occupied France. John supplied the intelligence eagerly awaited by the Resistance. Although Violette met her death in a concentration camp only hours in advance of the liberating forces, John helped to carve her name with pride.

both of us. Although John could be relentless in pursuit of acoustic excellence, the workaholic had his alter ego who spent endless days of Summer idleness on slow barges, rod in hand, or more frequently, his camera, as John was an accomplished photographer. Ask Viscount Snowdon, whose friendship with John was born out of a mutual respect for each other's work. Lord Snowdon widened the circle by introducing his friend, Kenneth

My Friend, John Bowers

**By Company Co-Founder,
Peter Hayward**

To an old man, living alone in Lancing, incapable of properly looking after himself, John was the Good Samaritan who turned up every Sunday with a freshly cooked dinner.

To Peter King, the voice of the BBC World Service for many years and still the 'voice' of B&W at demonstrations around the world, John was the catalyst that changed the life of a humble broadcaster by "simple faith, remorseless kindness and courage to go beyond the possible — repeatedly."

This was the John Bowers away from the public image of a slight, preoccupied chap at exhibitions. Ever the solicitous host, demurring when praised for the quality of his latest sonic masterpiece.

John and I shared our families. Our respective fathers were 'Pop' to

Grange of Pentagram to B&W, thus initiating a series of stunning cabinet designs that still characterise the B&W range today. The common theme in our quest for excellence was love of music. A love celebrated every year at Peter King's invitation in the BBC Box at the Royal Albert Hall. That mad gala of musical patriotism, the last night of the Proms was an excuse for the then MD of our Company to become a wild, flag waving fanatic — indistinguishable from the young hearts in the promenade area.

The period of our youth was spent in more sombre times. This was a celebration of the joy of music and John loved it.

Relations with the music world grew closer with the creation of our range of professional recording monitors. We were

present at recording sessions not only to listen to the music, but also to the requirements of the people in the studio.

For them, the acoustic authenticity of the musical instrument is a precious prize to be preserved. Our friendship with Christopher Hogwood was based on this precept — and led ultimately to concert patronage at the Royal Festival Hall.

John identified closely with his 'family' of B&W people. He knew the name of each of the ladies who wound the coils meticulously by hand before automation.

Performance bonuses began in the first year of trading and the whole Company profited from John's belief that everyone had a viewpoint worth listening to.

The last year of John's life was sad, yet contained precious moments. John probably thought it odd that we persuaded him not to tarry in Chicago after the 1987 C.E.S. for the usual parties. He arrived back on June 5th, for what was to be his last birthday, organised beautifully in secret by Robert Trunz. All his friends were there — John Dunkeley from the studios, Ken Grange hot from the drawing board, Malcolm King from the Laboratory, Luc Van der Heyden from B&W Belgium, Peter de Ruig from Holland, Peter Schulte from Germany, Bernard Hoad, Howard Cragg, Fred Downey and others associated with the beginnings of the Company.

In the chill of January 1988, the same people were gathered again in the ancient Cathedral at Arundel for a Requiem mass to

celebrate the life and work of John Bowers. They heard Peter King say "We, who were fortunate to travel that exciting road in his excellent company give thanks for the privilege."

That road, for me, runs deeper than our working partnership. It manifested itself in our shared love of dogs and it lies equally in the spontaneous escapades that took us to the remotest parts of Scotland.

Treks to Durness and onto Cape Wrath; exploring the grim peaks of the black Cuillins on Skye; and beyond to the Outer Hebrides where the names of British submarines are graven on the rockface of Loch Boisdale, and further west still, to that remotest of islands, St Kilda, where kittiwakes fly.

I remember a Christmas long ago. We drove to the Scottish Highlands to photograph 'those great snow-covered lumps' — the Grampian mountains in their Winter glory.

The families were concerned for our well-being and requested that we call from our hotel at Loch Eil to let them know everything was alright.

We stopped by a remote call box by the Loch, our surrogate 'Highland hotel', to reassure them before we slept in the car in order to experience the wonder of waking surrounded by such magnificence.

This, in essence, was my friend John Bowers.

Although I travelled that 'exciting road' with him in person, all music-lovers travelled with him in spirit. And were the richer for it.

Specification

Frequency Response	(-3dB) 35Hz to 22kHz typical, including listening room correction. (± 1.5 dB) 100Hz to 15kHz on axis at 1m 0.33 oct.	Bass/mid drive unit	170mm die cast frame, 6 point fixing. Critically curved woven Kevlar diaphragm, high power silver wire voice coil on Kapton former, low loss surround, phase-correcting bullet dust cap.
Channel matching	Typically ± 0.25 dB.	High-frequency unit	Free space mounted bullet, offset, anti-diffraction geometry, 26mm (1in) alloy piston dome, high temperature silver voice coil, silver wiring. Ferro fluid-cooled.
Sensitivity	88dB per watt at 1m.	Enclosure	Full Matrix multi-dimensional volume reinforced, exceptionally low structural resonance.
Impedance	8 Ω (minimum 5.6 Ω).	Loading	Bass reflex; quasi-Butterworth alignment for optimum room matching.
Maximum power	120w per channel peak programme.	Size	Height: 450mm (17 $\frac{3}{4}$ in) Width: 254mm (10in) Depth: 245mm (9 $\frac{5}{8}$ in)
Maximum level	110dB (1m) short term.	Stand	55cm high.
Location	On Signature stands, floor coupled.	Cabinet finish	Birds Eye Maple Grey Bobinga Root
Cables	Silver Signature bi-wire 3m, 5m to order.		
Crossover	Passive: 24dB/octave, time compensated acoustic 4th order. Silver wire inductors, custom-made polypropylene capacitors with silver leads.		
Crossover 2	An electronic crossover for use in converting the Silver Signature to an active system is in process of development.		

Compact Discs with the B&W Hallmark

Your B&W Silver Signature loudspeaker system has been specially created to enable you to get closer than ever before to listening to the music rather than to the loudspeakers.

You will, accordingly, hear a great deal more of the desirable ambience and detail in good recordings; unfortunately the faults in poor recordings will also be revealed. B&W has produced a catalogue of exclusive compact disc recordings to enable you to experience the full impact of your new system.

They are available from your dealer or direct from B&W Loudspeakers Ltd.



BW001
The Academy of Ancient Music:
Music: Christopher Hogwood.



BW002
Live at the Montreux Jazz Festival.



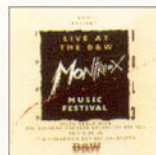
BW003
The EMU Abbey Road,
Classical Collection.



BW004
Live at the B&W Montreux
Musical Festival 1989
Vol. 1



BW005
Live at the B&W Montreux
Musical Festival 1989
Vol. 2



BW006
Live at the B&W Montreux
Musical Festival 1989 Vol. 3



BW007
The Opus 3 Collection



BW008
Live at the B&W Montreux
Musical Festival 1990
Vol. 4 Hugo Viggiano —
'Songs of the Unspoken'.



BW009
Suru —
Rolf Schimmermann.



BW010
A Tribute to John Bowers.
A collection of his
favourite musical pieces.



BW011
Mozart Masters. Extracts
from his greatest works.

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Specification

Technical specifications and product details for B&W Loudspeakers, including model numbers and performance metrics.

Compact Disc with the new format

Information regarding the new compact disc format, its features, and compatibility with existing systems.



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