# The Story Behind the Brand



The Opalum® of Scandinavia brand and range of technologies including Actisonic® and Actinline® is owned and licensed by Opalum AB, Sweden.

Opalum AB is backed by confident shareholders, including SEB Bank, Industrifonden and a select circle of businesspeople and designers.

# On-walls reinvented ... the speaker of the future!

Home Theater Magazine

### Our Background

Every great invention or innovation starts with an idea: a concept based on a solution. With the world changing fast and technology leading the way, communication merging with media from the palm of one's hand, televisions getting so flat and thin they hang like art on the wall, living environments becoming a part of our every changing lifestyle, and the desire to put it all together and have a REAL solution for living space audio and theater that is functional art and with the highest level of performance never before possible, Opalum was born.

Founder of Opalum technology, Pär G. Risberg, a literal genius from the cold Norse land of Sweden and an engineer extraordinaire in sound, acoustics, electronics, and digital technologies, came up with a truly unique and innovative technology for processing audio signal digitally while enhancing and controlling it all of the way through amplification and to speakers. In doing so, small sized speaker drivers in tiny cabinets sounded big, full range, dynamic, sonically balanced, accurate, clean, and time coherent. This technology became Actisonic®, which is the back-bone of all Opalum products and what makes the sonic "magic". Once the word got out about Pär's groundbreaking technologies, it reached the receptive and interested ears of Lasse Hald and Ulrik Sindberg, who each have more than two decades of experience as top executives at industry leading audio companies including Jamo. Together they founded Opalum in 2009 with a common goal: to make the world's highest performance, ultrathin, digitally active loudspeakers for today's progressive lifestyles. As many may recall, Jamo was a true innovator and ahead of its time when they embraced custom installation and inwall products in the 1990's, of which there was much success over time.

Now that they had the most innovative technology for advanced loudspeaker design and performance, the task was then making it all come together and look the part, with form following function and having a designer flair. Top Scandinavian and award wining Interior Designer with International experience, Eva Hanner, was brought into the team to create the design. She was up to the task and merged the technology with design, with every aspect of the physical structure having purpose and offering sonic and structural benefits.



Lasse Hald and Ulrik Sindberg with the FLOW.4810 speaker

Hald

Lasse Hald Managing Director

itsin

Ulrik Sindberg VP Global Sales and Marketing

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## **Our Philosophy**

From Opalum's inception, the philosophy was clear: to create an unmistakably full, rich sound experience from an ultra-thin, self-powered on-wall speaker system, with a distinct touch of Scandinavian contemporary design that people will want to own. No large, ugly box speakers, no heavy speaker cables, and no more racks of electronics and advanced hi-fi systems. Just pure, dynamic, musical sound from an easy to install and easier to use speaker system designed for two-channel music , home theater, and whole house distributed audio, while also offering wireless streaming with CD quality sound via Bluetooth and Bluetooth AptX.



The Opalum FLOW.4810



Pär G. Risberg developed the technology behind Actisonic®, which is the back-bone of all Opalum products and what makes the sonic "magic".



### Our Technology

At the heart of every Opalum product is our core technology, Actisonic®, and is what creates such sonic masterpieces. Many years of research from Linköping University has resulted in a technology that allows clear and pleasant sound from physically constrained and seemingly impossible acoustic designs. Model specific characterization and measurements ensure total control of the complete audio sub-system including electronics, transducers, and cabinet effects on the sound. This advanced technology provides very sophisticated inverse-filtering algorithms in each of the multiple amplifiers, used inside all speakers, thereby optimizing both frequency and time domain characteristics. The net result is a more natural and dynamic sound, clearer details, and an extremely welldefined stereo image even from impossible acoustic form-factors.

The advanced sound control and processing is done only in the digital domain while continually analyzed in real-time and adjusted accordingly to provide the best sound possible at all times.





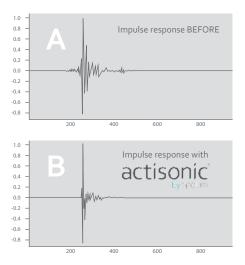
Lasse Hald in the anaechoic chamber doing meassurements on the FLOW.1010

#### **Our Sound Advantages**

All Opalum's active loudspeakers have the unique patented Opalum Actisonic® software built into a small, compressed chip. Actisonic® is the technology that uses advanced inverse filtering algorithms and psycho-acoustics to enable full, rich, accurate, dynamic, and clear sound from "impossible" designs. The process is highly sophisticated and incorporates various design-specific digital crossovers, acoustic equalizers, and phase correction circuits to allow for real-world applications of the speakers with a sonic quality that is better than most conventional speaker designs due to no limitations of the design and the audio signal integrity.

One of the most important aspects of the Actisonic® Technology used in Opalum speakers is vastly improved Impulse Response. This is a direct correlation to the transient response and dynamics of the source material (recording), like a slam of a snare drum or rim shot, burst of a trumpet, or powerful peak of a vocal. With conventional electronics and even the best of standard loudspeaker designs, it is common to have an impulse response as shown in model A, and with Actisonic® correction in the model B. The result is one that closer mimics the original impulse response of the recording itself, and exhibits extremely low distortion, faster decay and less ringing, accurate pace and timing, improved frequency response and phase with overall better time domain behavior, and a natural and accurate sound closely resembling the actual source recording.

The benefit of Actisonic<sup>®</sup> is that very bold and slim speaker designs can be executed without compromising the sound. This is truly innovative, since other manufacturers have to acknowledge that slim design works against good sound.





#### New standard for active speakers

Each Opalum speaker has built-in amplifiers specifically controlling low, mid, and high frequencies, and using the patented Opalum Actiline® technology which takes an innovative approach eliminating the need for thick power cables.

As a unique new feature, the speakers receive both electricity and sound signals through the same thin signal cable connecting loudspeaker and hub, the latter of which is the focal point for all your music and sound devices. With Actiline® it is now an option to use designoriented speaker cables in the color you want if exposed, or hide the wires inside the walls where possible. You don't have to worry about having thick power cords connected to each speaker, which is common practice with other active speaker systems, so the complete visual expression of the sound system is not ruined by thick power-cables anymore.



You can stream CD-quality audio wirelessly to all Opalum speaker systems



I am amazed at what I just heard! Opalum is an audiophile sound system for the 21th century! Many manufacturers have been trying to do this for years but Opalum has pulled it off!

> Mark Friedmann Former president of JBL Consumer Products

#### **Our references**

The Opalum speakers have taken the audio industry by storm getting rave reviews and winning numerous tests and awards.

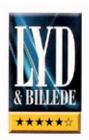
Opalum products are available at leading audio/ video retailers and custom installers, as well as some of the most exclusive Scandinavian furniture stores and life-style shops. Opalum technology is constantly finding its way to new applications as Europe's largest kitchen manufacturer will soon offer an Opalum designed sound system that can be integrated directly into their exclusive kitchens.

Opalum is without a doubt the next evolution of audio loudspeakers and technology and is destined to create a new trend in audio.





SOUND QUALITY  $\bigstar \bigstar \bigstar \bigstar \Leftrightarrow$ FUNCTIONALITY  $\bigstar \bigstar \bigstar \bigstar \Leftrightarrow$ USER FRIENDLINES  $\bigstar \bigstar \bigstar \bigstar \Leftrightarrow$ QUALITY  $\bigstar \bigstar \bigstar \bigstar \bigstar \Leftrightarrow$ 





Opalum Flow.1010 On-Wall Speaker System PERFORMANCE

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Opalum was founded in 2009 with a clear strategy of developing and bringing to market ultra-thin, on-wall self-powered speaker systems with a clear touch of Scandinavian, contemporary design and full, rich sound.

Visit our website at www.opalum.com for more information about the Opalum line of products and technologies, as well as audition at your nearest dealer and experience the freedom of wireless sound with unparalleled performance.

#### For more information please visit

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