Innovation in Sound

The story behind the Kvålsvoll Design Sound

To create a sound experience so exciting and thrilling it redefines sound reproduction for commercially available home sound systems.

The result from developing this new concept for small room sound reproduction can now be experienced in the Kvålsvoll Design demo room.

A completely new line of loudspeakers has been designed, implementing several new technology developments.

And it works – the result is engaging sound that makes listening a whole new experience:

“I must first say that I have long since lost interest and have not been active with sound the last 10-15 years, but the visit in "The Moderate Cinema" made me wake up."

How this started – origins of the Kvålsvoll Design sound

Experience shows that a large, custom system properly set up in a dedicated room can sound quite different, with all the realism and clarity and dynamics of real world instruments and sound effects.

This is a difference that both enthusiasts and more casual listeners immediately recognize – it sounds realistic and exciting.

But can this sound be replicated in a smaller system that will easily fit in to a small room, without needing extensive construction work for acoustics.
The solution must be able to reproduce everything with the highest sound quality, accurate and at the same time realistic and entertaining, from dubstep to baroque ensembles, music or movies.

*The sound – alive and entertaining*
Art and science

The Kvålsvoll Design sound is different due to the combination of new and different criteria for sound, and then by technology used to design loudspeakers and how they interact with room acoustics.

To be able to recreate a specific sound, it is necessary to know what properties define these desired characteristics. So this was the starting point – to find the entertaining and exciting sound.

Much of the work done at Kvålsvoll Design deals with how we perceive sound. This has lead to a complete reevaluation of commonly used criteria for measuring sonic performance.

When all properties of the sound are known and quantified, the engineering task of creating this sound with reasonably small speakers can start.

To meet the requirements it was necessary to develop new technology solutions.

The new generation loudspeakers developed by Kvålsvoll Design implements several new advancements in technology. By using knowledge learned from simulation of complex dynamic systems, it was possible to design things like the Compact Horn subwoofers. All speakers are designed using extensive simulation, and they all have new technical solutions deemed necessary to satisfy performance requirements.

One of the most important parts is the calibration procedure for the subwoofer system, which accounts for sound field properties that affects physical tactile feel and envelopment for low frequencies. So far Kvålsvoll Design is the only company using this kind of approach to solve the problem of achieving that airy, powerful and large bass in a small room.

Acoustics, placement and calibration plays a significant role for sound. It is obvious that guidelines for both acoustics and calibration must be included, for the customer to be able to replicate the sound.

Kvålsvoll Design Sound Solution

The Kvålsvoll Design Sound Solution puts it all together in a package including speakers, room, electronics, calibration & set-up.

If you go to a Kvålsvoll Design demo room and find the sound you want, the Kvålsvoll Design Sound Solution ensures the resulting sound in your room will be similar.

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The solution is customized and scaled according to requirements.
A small 2-channel solution can consist of 2 F1 main speakers with 2 small S6-14 Compact Horn subwoofers.

A multichannel system for music and movies with full capacity will have full 7.1 speaker arrangement, and bass system with typically 2 or more T110 Compact Horn subwoofers.
Example installation with F1 main speakers, C1 center, S1.2 surround and 4x T110 stacked Compact Horn subwoofers

Read more on [www.kvalsvoll.com](http://www.kvalsvoll.com)

**Kvålsvoll Design Sound Solution** – Presentation of the Sound Solution

**New Generation Loudspeakers** – More about the new generation loudspeakers and the new sound.

**Compact Horn Subwoofer Technology** – The technology behind the addictive bass.

**How to set up a Home Theater Sound System** – What you need to know to get the best sound; equipment, room acoustics, where to place things, how to calibrate.