Document: Sound Systems for Studio and Monitoring

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Sound Systems for Studio and Monitoring



Sound reproduction for sound production

Good speakers cost only a fraction of the total budget for a typical studio build. Considering the impact the quality of the speakers will have on work efficiency and end result quality, only the best and most suitable speakers for the specific needs should be considered.

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Show off your work with impressive sound

The Kvålsvoll Design sound is different – exciting and entertaining.

This is a difference even the most casual listener will immediately notice, and the work you have put so much effort into will be presented to your client in such a way that the experience really impresses – "yes, this is what we want!"

Improved productivity

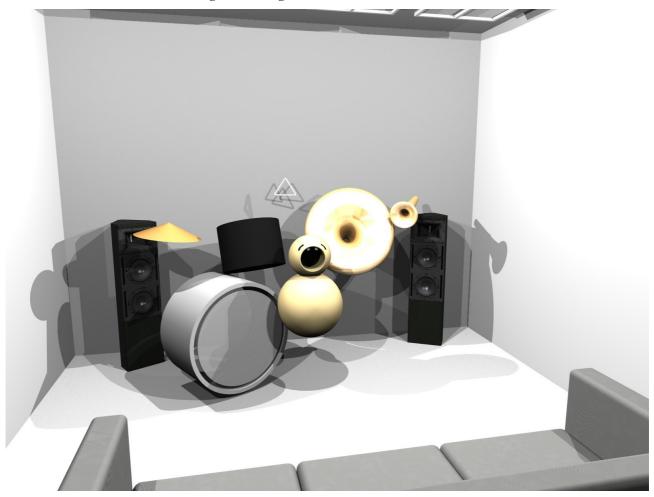
Accuracy is mandatory to ensure what you hear represents the sound of your production.

The exciting sound presentation is the foundation for the criteria on which the development of the new generation loudspeakers is based upon. Since accuracy proved to be required to achieve the desired sound characteristics, we ended up with speakers having very accurate specifications and ability to reproduce all kinds of program material.

Exciting and entertaining sound means you will enjoy working longer session and experience less fatigue.

Better resolution at low volumes allows for turning down the volume when listening at a calibrated level is not necessarily required, because you can still hear all the details.

Accurate can also be more entertaining and exciting to listen to





Better end-product quality

Wider frequency range, more clarity and proper dynamics will allow you to detect imperfections but also hear benefits from improving sound quality.

Revealing clarity will make any imperfection stand out so that it can be easily heard, you will immediately recognize limiter distortion or clipping.

The three-dimensional sound-stage allows you to see the placement of individual sounds more easily and accurate. This is a result of the speakers radiation pattern, set-up and room acoustics recommendation.

Capacity for higher spl means you can turn it up with no compromise in clarity or resolution. Certain aspects of sound require higher spl, such as checking the tactile impact in the bass range, and many faults like distortion and noise artifacts will reveal themselves as you turn up the volume, providing the speakers have the required capacity to still sound clear and follow the dynamics.

Full frequency range capability matters. Traditional acoustic instruments do not have much energy below 30-35Hz, but transients from such as drums contain energy across a very wide frequency range, and having the low cut-off below 20Hz will improve reproduction of impulses, because there will be less audible ringing. And today's electronic music can have high energy levels extending below 20Hz.

For classical music there may be low frequency energy due to the acoustic properties of a larger space, induced by footsteps or external noise. Some of this may be beneficial and desired to preserve, as it will add to the experience and improve the sense of a larger space, but low frequency noise that is not part of the performance may be better to remove, and to realize it is there your reproduction system must be able to let you hear it.

The idea of using lesser speakers to check how the sound translates when played back on small radios, car stereo and so on, falls short when you realize that a speaker can have many and very different faults. A better approach to get more predictable results is to have a monitoring system tuned for best possible performance, with proper dynamics and smooth frequency response.

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.

Kvålsvoll Design Sound Solution	
Loudspeakers	New generation loudspeakers from Kvålsvoll Design. Provided by Kvålsvoll Design – direct or through dealer.
Electronics	Off-the-shelf processors and amplifiers and playback devices specified by Kvålsvoll Design to ensure no loss of audio quality and required calibration adjustments are available. Sourced from dealer, or use what you already have if it meets requirements.
Room acoustics and placement	Recommendation based on room and intended use. Do it yourself or contract an installer.
Calibration and set-up	Guide for calibration and set-up. Do it yourself, or contract a Kvålsvoll Design certified installer.

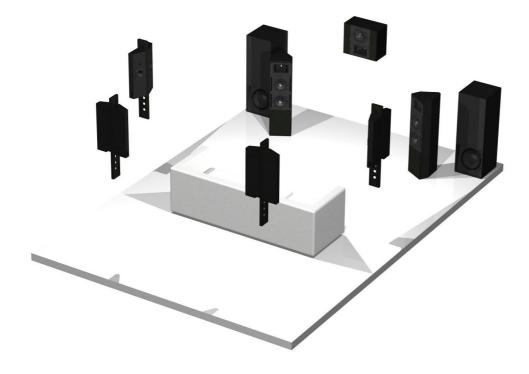


The solution is customized and scaled according to requirements.

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.



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Example installation with F1 main speakers, C1 center, S1.2 surround and 4x T110 stacked Compact Horn subwooofers. This configuration is suitable for near-field/home mix of multichannel for movies.



More information on www.kvalsvoll.com

Sound Demo – Experience and find out what this new sound is all about in The Moderate Cinema demo room.

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

<u>Compact Horn Subwoofer Technology</u> – The technology behind the addictive bass.

<u>Designs section</u> – Presentation papers with technical specifications for the loudspeakers.