



INFORMATION ON NEXT MEETING

## *Cobranet and Ethersound Audio Networks*

*Hotel zum Schützen Schachenallee 39 5000 Aarau  
(Info see <http://www.gasthofschuetzen.ch/>)*

Thursday, 27<sup>th</sup> of September 2007, 17:30h-19:45h, Doors open 17:15h

**SPEAKERS:** Attila Karamustafaoglu, Studer Professional Audio GmbH  
Yves Ansade, Auvitran  
Romano M. Cunsolo, Biamp Systems

**ORGANISER:** David Norman

**LANGUAGE:** English

In the last few years several technologies to transmit audio over Ethernet or over CAT5, glass fibre etc. have been developed. This meeting will concentrate on two of the technologies used to transport audio over Ethernet. Both these technologies are standardized, that is to say that compatible components which all work on the same network can be obtained from several different manufacturers.

Firstly Attila Karamustafaoglu will give an overview of the Ethernet technology by explaining the OSI model and its layers. Based on this it will be explained how audio can be transported using Ethernet technology. The pros and cons of transporting audio on different Ethernet layers will be explained. Further the rough structure of Ethersound and Cobranet Ethernet packets will be explained.

Yves Ansade will then present details of Ethersound, the current realizations and implementations along with its current use.

Romano M. Cunsolo will then do the same for Cobranet.

To conclude, other popular audio networking technologies will be presented and there will be time to ask the experts questions.

**Organisation:**

17:15h Doors open  
17:45h Presentation Attila Karamustafaoglu  
18:15h Presentation Yves Ansade  
19:00h Presentation Romano M. Cunsolo

Refreshment break in the middle of the meeting.  
19:45h approx. end of the meeting  
20:00h Optional dinner at the restaurant in the hotel

Please register as usual at:  
[www.swissaes.org/programme/signup](http://www.swissaes.org/programme/signup)

**REPORT ON PREVIOUS MEETING**  
***Developments in Loudspeaker Technology***  
Thursday, 23<sup>rd</sup> of August 2007 at Radio Studio SRDRS, Bern

**SPEAKER:** John Watkinson, Vocals/Guitar by Lisa Marshall

**REPORTER:** Gabriel Leuzinger

Despite heavy road works in the city centre of Bern, around 23 people found their way to the Radio Studio of Swiss Radio DRS for a meeting named “Developments in Loudspeaker Technology”. John Watkinson started with a short and humorous explanation of the evolution of the human ear and the importance of the time domain for the analysis of sound sources. This leads to the requirement of accurate crossover networks, which is free of phase distortion at crossover frequency. Of course, such filters can only be implemented in active speaker concepts. And according to John, only point source reproduction is able to reproduce virtual point sources in stereo setups. Consequently, he has developed an active speaker range featuring perfect omnidirectional radiation in the horizontal axis. The result was proved immediately by comparing Lisa Marshall’s great live performance with the loudspeaker reproduction.

Furthermore, John Watkinson developed a portable system using smaller loudspeakers of the same concept. The audience was really surprised by the possible reproduction quality,

clearly never reached by traditional and currently available products. A third development has concentrated on speakers that approach flat panel speakers in terms of physical depth. There are various applications and huge possibilities for good sounding flat speakers. A main problem is the depth of a traditional woofer chassis; John has solved it with the development of a special woofer utilizing high performance diaphragm materials and a complete new design of the driver. The resulting passive speaker (see picture) is about 4 cm in depth and features a low end not expected from a flat speaker. However, Lisa’s final performance demonstrated, unplugged live music cannot be reached by any technical system, neither by sound reproduction nor by emotion!

The Swiss AES Section would like to thank John Watkinson and Lisa Marshall for their presentation and the long journey they have accepted. Many thanks also to Fiametta Lohri of SR DRS for her very appreciated support and Terry Nelson for his introduction.

