



INFORMATION ON NEXT MEETING

## *Radio Frequency Interference to Audio Systems*

*Studer Professional Audio GmbH, Althardstrasse 30, 8105 Regensdorf*

Thursday, 10<sup>th</sup> of May 2007, 1745h-1945h, Doors open 1730h

**SPEAKERS:** Jim Brown

**ORGANISER:** David Norman

**LANGUAGE:** English

How do you connect up an audio system so that it does not hum? Something everybody in the audio industry knows - or at least pretends to know. Jim Brown, a leading US consultant, has contributed considerably to our understanding of this subject and has been closely involved with one of the important publications on this subject, AES 48-2005 "AES standard on interconnections" (downloadable from the AES web site).

But with the increasing use of the RF spectrum the question of Radio Frequency Interference must also be considered.

The presentation begins with a study of the fundamental mechanisms by which radio frequency interference is coupled into audio systems. Attention is then given to design techniques for both equipment and systems that prevent interference from occurring. The

program concludes with a discussion of methods for diagnosing problems in existing equipment and systems, and techniques for eliminating the interference.

This is a key presentation for any audio professional involved in building audio systems, whether for permanent installation, mobile use, studios etc.

Organisation:

Doors open 17.30

Presentation from Jim Brown

Refreshment break in the middle of the presentation.

End of the meeting, approx. 19.45

Optional dinner at the restaurant

Feldschlösschen nearby.

Jim Brown got interested in music and radio as a teenager, falling in love with jazz and Bach, and qualifying for an amateur radio license before his 14th birthday. Three years later he received Amateur Extra Class and First Class Radiotelephone licenses, and entered the Electrical Engineering program at the University of Cincinnati. He received the BSEE in 1964 and has worked in broadcasting and professional audio since 1960. Since 1985, his consulting practice has specialized in the design of sound systems for worship, performance, and sports facilities. More recently, his focus has expanded to include research and consulting on EMC issues.

Mr. Brown is a Fellow of the AES, and a member of the Acoustical Society of America, the Society of Broadcast Engineers, the Society of Motion Picture and Television Engineers, and the US Institute for Theater Technology, and has presented invited papers to all of those societies. He is a member of the AES Technical Committee on Acoustics and Sound Reinforcement, and the AES Standards Committee's Working Groups on Microphones, Intelligibility, Acoustic and Sound Source Modeling, Digital Audio Transmission, and Audio Connectors, and is Vice-Chair of the Standards Working Group on EMC and Chair of the AES Technical Committee on EMC. He is active on the ham bands as K9YC.

**REPORT ON PREVIOUS MEETING**  
***Frequency allocation for DVB-T – Wireless audio applications in danger***

*Wednesday, 17<sup>th</sup> of January 2007 at tpc, Zurich*

**SPEAKERS:** Matthias Fehr, Sennheiser Germany  
Thomas Saner, SRG SSR idée Suisse  
Roger Hess, TV Production Centre (tpc) Zurich AG

**REPORTER:** David Norman

Although no exact count was made some 60 visitors made their way on this evening into the tpc. The evening started with presentations from the Swiss Broadcasting. Thomas Saner presented “DVB-T Network Planning issues” and explained the use of digital broadcasting and the consequences that it will have for the HF spectrum and wireless audio applications. Roger Hess then explained the use of wireless audio technology in the SRG.

Matthias Fehr then presented “New frequency allocation in the UHF Band, Wireless audio applications in danger”. He explained the work

of the DKE working group “Professional Microphone Systems” where different manufacturers and users are all working together to influence the decision makers. He appealed to everyone to fill in the “detailed application description” and send this on to the manufactures.

A copy of the presentations and additional material to this event can be downloaded from the Swiss AES Website: [www.swissaes.org](http://www.swissaes.org) (programme / download). Further information is available from <http://www.bakom.admin.ch/> and <http://www.digitalesfernsehen.ch/>.

