# AES SWISS SECTION NEWSLETTER

**109th. Issue**

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INFORMATION ON NEXT MEETING

## *Developments in Loudspeaker Technology*

*Location: Radiostudio of Schweizer Radio DRS, Schwarztorstrasse 21, Bern*

Thursday, 23rd of August 2007, 17h30

**SPEAKER:**     John Watkinson (Engineer, AES Fellow, Author, Technical Director of Celtic Audio Ltd / UK)

**ORGANISER:**     Gabriel Leuzinger

**LANGUAGE:**     English

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The Swiss AES Section is very honoured and proud to be able to organize this meeting with one of the most renowned digital media technology guru: for many audio professionals the name "Dr. John" speaks for itself. Regular readers of the "Resolution" audio production magazine possibly know **John Watkinson** best from his famous columns. With his presentation in Bern, John will share his wide knowledge with us to improve the weakest link in the audio chain.

### Developments in Loudspeaker Technology

Recent and better understanding of the human auditory system has led to the criteria for accurate sound reproduction being better known. Traditional designs pay attention to the frequency domain whilst neglecting the important temporal and spatial domains. This presentation explains the criteria for accuracy and puts forward engineering solutions to meet those requirements. A number of loudspeaker designs will be demonstrated.

### Biography of John Watkinson

John Watkinson is a Chartered Engineer, a Fellow of the AES and the author of "The Art of Digital Audio". He writes and lectures extensively and has received awards for both. He has degrees in electronics and in sound and vibration and is a member of the Society of Expert Witnesses. He is the Technical Director of Celtic Audio Ltd.

Doors open: 17h30
Beginning of presentation: 18h00
After the presentation, an optional dinner will be held in a restaurant nearby.

Please don't miss this opportunity and subscribe as early as possible at:
www.swissaes.org / programme

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## REPORT ON PREVIOUS MEETING

# *The Audio Installation at the Basel Tattoo*

Monday, 21$^{st}$ of June 2007 at Kaserne Basel

**SPEAKER:**     Dave Haydon (Out Board electronics) and
             Thomas Strebel (Audiopool GmbH)
**REPORTER:**     Attila Karamustafaoglu

Around 22 people gathered on this warm summer evening for this meeting at the Kaserne Basel. Being one day before the official start of the show, the scene was already very hectic as anyone would expect. Nevertheless, Dave Haydon showed the group around the facilities and explained the TiMax system in a quite room at the venue. The idea of it is to utilize many PA channels to enhance the acoustic image of a large scene for a large audience. The TiMax system does this with a matrix up to 32x32 in size which has a gain stage and a delay line in every node. The values are defined by the controller which allows the user to enter scenes, speaker and actor positions with a graphical user interface. According to the sequence of the show, the scenes are recalled and thereby the levels and delays in the matrix nodes are set. The TiMax system utilizes mostly delay differences to create the localization effect while still providing high audio levels to all channels. It is also possible to interpolate between the scenes or create dynamic movements. Later, Thomas Strebel continued the tour and showed the control rooms for the PA as well as for the live broadcast and the CD and DVD Production. Finally a visit of the final rehearsal concluded this very nice evening. The Swiss AES Section wants to thank the speakers for this very nice meeting.