



# AES

# SWISS SECTION NEWSLETTER

143<sup>rd</sup> Issue

## *UHD-1 full-IP OB-van in operation*

Thursday, the 25<sup>th</sup> of April 2019, 17h00  
Tpc, Fernsehstrasse 1-4, Zurich

**SPEAKERS:** Adrian Hilber – tpc  
Stefan Ledergerber – tpc consultant

**ORGANISER:** Gabriel Leuzinger

**LANGUAGE:** German (slides in English)

### **Programme**

The doors will open at 17h00 and the presentations will start at 17:30.

Please subscribe as usual at the web address: [www.swissaes.org](http://www.swissaes.org) (under programme).

We look forward to welcoming you on the 25<sup>th</sup> of April!

### **Summary**

As an experienced audio-guy with deep IT-background, Adrian Hilber was part of the project team of SRG's first full-IP OB van. At the time of starting the project, it was not an easy decision to go for a full-IP implementation. And it's not a secret: completion of the UHD-1project took longer than expected. A lot of demanding questions and new problems in broadcast production area required to deal with or needed to be solved by the vendors and the project team: PTP synchronization, network orchestration, new workflows or missing/open standardization just to name a few. Since Adrian is also part of the operational OB-van-crew, he really has a perfect overview about the advantages and pitfalls of the new technology and will guide us also thru the practical part of the event.

We all know Stefan Ledergerber as a highly skilled developer of new audio technologies, for example at companies like Studer and Lawo. If you read thru the AES67 standard, you will find his name as a member of the standardization group among other audio gurus. Meanwhile, running also his own company Simplexity GmbH, he has been involved in tpc's migration path to full-IP-technology in production, where he's guiding in the role as a tpc-consultant thru the technical cliffs of the new technology. For our AES event, Stefan Ledergerber will give an overview about the SMPTE2110 audio/video-over-IP standard and build a bridge between audio and video in an IP network world. He will also touch on PTP based synchronization as well as latencies and their causes. Eventually he will clean up some of the myths about "slow" networks.

## About the Speakers

**Adrian Hilber** started his professional career as a Cisco-certified Telematic Technician for the chemical industry of his homebase Basel. Interested in audio for a long time, he decided for a further education at TTS, passed the federal exam successfully (organized by the Education Committee of AES Swiss Section in collaboration with the SERI) and graduated with the Sound Technician Diploma. He then became a professional expert at tpc ag and meanwhile his responsibility is covering a wide area from project work, consultancy and support until operation. Adrian Hilber has been a core member of the UHD-1 project team. Hence, his expertise is also in great demand for other ongoing IP projects within the SRG.

**Stefan Ledergerber** started his professional career as a development engineer at Studer (Harman), then became product manager of the "Vista" series audio mixing consoles, and later moved on to heading R&D across Studer and Soundcraft. Setting focus on audio-over-IP technology he then joined Lawo as director of R&D, where he was involved in driving the development of RAVENNA networking technology. Stefan Ledergerber holds a master degree in electrical engineering and in "Management, Technology and Economics" from the ETH Zürich. He is a contributing member of the AES67 and SMPTE2110 standardization groups. Today he runs the consulting company "Simplexity GmbH", offering independent consulting and training services in the field of audio/video-over-IP networks and user interface concepts.

REPORT ON PREVIOUS MEETING

## *The Studer/Revox Museum*

*Joint VDT & Swiss AES meeting  
8<sup>th</sup> of December 2018, Altstetten, Zurich*

**SPEAKER:** Walter Stutz

**REPORTER:** David Norman

On this Saturday a group of about 50 people, consisting of VDT and AES members met at the Studer/Revox Museum in Altstetten, Zurich which has been open for one year.

Walter Stutz, initiator and director of the museum welcomed the guests, as well as former Studer developers like Guido Besimo (tape machines) and Hans Leonhard (mixing consoles) and donators. A concentrated knowledge and a lot of history characterized this extraordinary meeting.

The tour started in the 2nd room of the museum, where beside measuring instruments and prototypes, real rarities like radio receivers from the 40s and early Televox amplifiers, which today are completely forgotten, are set up. In addition, the first Revox 60 turntable from the 50s was shown. A Studer C37 tube tape machine, which stood in the Abbey Road Studios as master machine and on which the Beatles were mastered, was then used in the second part of the tour for the audition. The latest acquirement of the museum and its biggest exhibit is a Studer 289 mixing console.

In the main room is the company's first larger mixing console, a Studer 69-48 from 1958, serial number 101 from the federal parliament building. Also a report mixer in suitcase size from the Radio Bern from this time stands opposite which was developed by Hans Leonhard. On the walls Revox tape machines in all colours and designs are exhibited. Opposite on the window front are the large Studer tape machines. From the A 80 and its successors up to the mastering machines A 820 and the last 24 track A 827 as gold edition, which Walter Stutz brought back from California, all are ready for operation.

After an aperitif break, we went into the first room to the big mixer and could take some pictures of the C37. Then we listened to further recordings in the big room on different machines and loudspeakers. Anecdotes and memories were lively exchanged. There was a fantastic atmosphere, with which the official part was concluded. Afterwards the bigger part of the group went to the restaurant next door. There the evening was rounded off with food and drink.

Many thanks to Walter Stutz and his museum colleagues for the unforgettable occasion.

