

Andreas Koch

Founder, CEO, Engineer

Andreas Koch got his start working for Studer ReVox in Switzerland back in 1982. It was his task to build the world's first fully asynchronous digital audio sample rate converter, patent granted in 1984. Also, in 1984, he designed one of the first filter banks for digital audio. 512 banks were used to perform digital noise reduction for old recordings. Some of the same ideas were used later in audio compression algorithms such as MP3, AC-3 and others.



Following his accomplishments at Studer Revox, he went to work with Dolby Labs in San Francisco. In 1985 he built all the digital signal processing of the AC-1 encoder and decoder (delta modulator). This was a professional digital audio compression scheme used for television transmission. It was Dolby's first digital audio product and was sold quite successfully. In 1986 he built the hardware for the very first incarnation of what is today the widely used AC-3 compression algorithm.

In 1987 Studer ReVox in Switzerland required his return. Andreas managed the development of a professional digital audio tape recorder which was a 48-channel DASH format on 1/2 inch tape. For the next two years he was involved in the market and technology research for hard disk (PC) recording in professional applications. This job required visiting many high profile recording studios worldwide which helped to establish his solid base in this industry.

Andreas continued his great work in Switzerland until his transfer to Studer Editech in Menlo Park, CA, in 1989, where he was tasked to manage a group of engineers designing the ultimate hard disc recorder for professional post production applications, launched "Dyaxis" in 1992 which is still used today. The user interface was so revolutionary that it was copied by many competing products still produced today.

In 1993 Sony in Florida needed his services. He oversaw product development for professional audio products and launched various mixing consoles. Sony recognized Andreas' great successes and asked him to relocate to San Francisco in 1997 where he started and managed the development for the world's first 8-channel DSD recording / editing / mixing machine. "Sonoma" is still used today in studios throughout the world and has been used for most SACD releases. He designed all the digital parts of A/D and D/A converters that helped establish DSD as a superior sounding audio format in SACD. He followed that up by expanding the Sonoma to 32-channels of DSD on a single PC. Andreas also participated in all standardization committees for SACD in conjunction with Philips.



During 2003 Andreas decided to go into business for himself as an independent contract engineer. For the next four years he designed all of the digital components, algorithms and architecture for EMM Labs digital audio products; professional and audiophile. He designed and implemented various revolutionary algorithms for sample rate conversion (SRC), as can only be expected from one of the original inventors of SRC. He also developed a discrete D/A converter and unique architecture for clock management from digital audio transmission inputs.

In 2008, Andreas Koch formed Playback Designs and launched an integrated SACD/CD player with a variety of digital inputs that incorporates all the experience, knowledge and algorithms Andreas gathered and developed over the last 25 years, right from the onset of digital audio.