

## INVENTIONS & INNOVATIONS

# Mike Denecke: Dancing in the Moonlight

by Richard Lightstone and David Waelder



"Father Time";  
note the  
bar code collar.

**"The Denecke Time Code slate is probably the most photographed object in the world..."**

**-PETER WEIBEL**

It's ironic that the man responsible for this ubiquitous film icon was himself so modest and content to operate in the background. A self-taught engineer, Mike followed a singular path to his role as "Father Time."

He came from a musical family and was educated as a musician. He played lute and guitar and trained with classical guitarists Andrés Segovia and Julian Bream. He loved to play and record music and became involved in film sound as an outgrowth of this activity. In the late '60s, Mike worked with the Nitty Gritty Dirt Band. He

In 1986 when I handed a Denecke TS-1 Time Code slate to a camera assistant I was asked, "Why do we need a slate from the sound department?" Twenty-three years later, we are expected to provide a time code slate on every job.

The credit for the Denecke slate goes to the late Michael Denecke, production sound mixer, engineer, musician and member of Local 695. Over a 40-year span, we have witnessed huge changes in the tools we use to mix sound; analog tape and the Nagra Recorder were pushed aside by the move to digital recording. The DAT Recorder was replaced by the current file-based recording systems in use today. Throughout all this incredible technological march, the time code slate has been the one constant that has survived and helped to push that new technology.



From left to right:  
Peter Weibel, Charles Parra and  
Chinhda Khommarath



A Cine-Sync K-2 to link KEM editing machines. Denecke made and sold about 400 of these boxes.

Manfred Klemme

also worked for Les Konig, jazz musician and record producer at Contemporary Records and probably got into recording then.

Peter Weibel remembers: "I first met Mike in early 1970 at Terry Walker's Sound Services where Mike was fixing a Magnasync Moviola Recorder. I had just arrived in Los Angeles to introduce the KEM flatbed editing products. A customer cutting the Woodstock film had a problem with one of the KEM amplifiers and I got Mike Denecke to take a look at it and he fixed it without ever seeing one before."

Mike had a recital at the Brand Auditorium in Burbank in 1972 and left the next day for France. While in Paris, he participated in the recording of "Dancing in the Moonlight" with the King Harvest Band, which reached no. 13 in the *Billboard Hot 100*. The year he spent in Paris was pivotal for him because, on his return, he sold his lute and bought an oscilloscope. Chinhda Khommarath, who teamed with Mike as a boom operator on commercials and fabricated prototypes for his products, says the oscilloscope was "just another instrument for Michael."

Although he continued to accept assignments recording commercials and was the mixer on John Cassavetes' film, *A Woman Under the Influence* (1974), by 1975 Denecke had moved firmly to the engineering side of the business. He was a partner in a company providing dubbing machines and was already engaged in creative engineering solutions for the business.

Around this time, Peter Weibel had requests to link KEM editing machines together for clients with a need to see multiple screens. This originated with *Woodstock* and expanded with the 360° CircleVision films made by Disney. Mike had already made an electronic footage and frame counter for the KEM that could control the transport so Peter turned to him for a solution. Mike designed a bi-phase circuit that held multiple machines in sync. This was the beginning of the Cine-Sync line of products that are still available today. Keller Electronic in Germany later tried to make a linking circuit but theirs never achieved the reliability of Mike's elegant design. In 1986, Mike incorporated Denecke Inc.

Recognizing the potential of time code, Manfred Klemme, West Coast Nagra representative, encouraged Kudelski to make a recorder incorporating the code. In 1984, after little progress, they suddenly, and without warning, shipped him 31 time code recorders. With no clearly defined path to use the data generated by the machine, Manfred worried about how he might sell them.

Time code assigns a unique number to each image frame. The potential of the code is easy to grasp but mechanical requirements inhibited its use in film production. In use since 1967, it was confined to video production because, although the code could readily be recorded on tape, there was no easy way to imprint it on film. Ivan Kruglak, CEO of Coherent Communications, reasoned that it was not necessary to record code continuously on the film if an accurate record could be made at a single point. Since crystal-controlled motors run the cameras at a constant speed, accurate

code could be extrapolated for any frame if one knew the correct code at any point in a take. This could be accomplished by photographing a display of running code and it was the breakthrough idea that enabled the use of time code for motion picture production. Kruglak was the first to make a practical slate for production use but his product, the TC-400A, while capable, was large, complex and expensive. It was too unwieldy for regular production use and Manfred was stepping around boxes of unsold time code Nagras in his shop.

Manfred approached Mike Denecke about the problem and suggested that he make a larger display of the time code reader that Mike was making for the KEM, effectively converting it into a slate. Mike asked how many slates he might sell and Manfred replied, "About a hundred of them." Mike said, in that case, he'd do it. (More than 5,000 slates have been sold to date.)

Along with Peter Weibel and Ivan Kruglak, Mike served on the SMPTE Time Code Committee developing standards for time code application so he was well aware of what was required. In consultation with Peter and with Manfred, they decided on freezing the code on closure of the sticks and holding the display for



Michael Denecke and Charles Parra at Showbiz Expo L.A., 1992

four frames before switching over to user bits. Applying his knowledge of production requirements, Mike fashioned the slate with an undercut below the sticks so a camera assistant could operate it with one hand. His smaller, lighter slate was an immediate success. Office manager Spike Dolomite soon dubbed him "Father Time" for his mastery of the field and drew the iconic cartoon reproduced in this article.

As the business grew, Mike developed more products including phantom power supplies, large display slates, the GR-1 Master Clock, A-D converters and other creative solutions to the practical needs of film and audio production.

Charles Parra joined the company in 1991 just out of trade school. Sensing a kindred spirit, Mike assigned him the task of laying out on the computer the circuit board for the original slate. He didn't need to have the work done but he wanted an assistant comfortable with computer circuit design. Although self-taught himself, he sent Charlie to school to take courses in electronics.

Charlie remembers: "Mike fostered a working friendship rather than a typical boss worker scenario. He had a great sense of humor



Denecke's shop on Cahuenga Boulevard

and was very unselfish. When I'd show up for work, Mike would often say, 'Charlie, I had this great idea in the shower.' I still hear his words now.

"Mike was so shy that he would play at parties but would never like to acknowledge how well he played the guitar."

A small film community grew up in the North Hollywood part of Cahuenga Boulevard where Mike had his shop. Manfred's office was immediately adjacent to the shop; Chinhdha, Neil Stone and Peter Weibel were all nearby. They often met for lunch and worked cooperatively. Mike developed a portable microphone mixer for his own use but declined to develop it, not wanting to compete with friends making similar products.

When Manfred told Mike that he was interested in making boom poles, Mike encouraged him and advised him on how to go about having them fabricated. Knowing that Manfred had little start-up capital, Mike handed him a pad of Denecke purchase order forms and told him to buy all the materials he needed for 200 poles and repay the debt when he could.

Mike Denecke died suddenly of a heart attack in March 2000 while hiking with his wife Celia and his nephew. The last product he worked on was the AD-20 Microphone Preamp. Charles Parra and Celia kept the business operating and Charlie later assumed full control of Denecke Inc.

Few of us knew the man in full. He was, by turns, a teacher, a sound engineer, an entrepreneur, an inventor, a lover of wine in good company, a musician and a friend.

Weibel: Michael was an artist.

Chinhdha: Michael was a teacher, a brother. Mike taught me about the economics of business and how to be an independent businessman.

Parra: He was my mentor.

We like to think of him playing his guitar and dancing in the moonlight.



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