

## Winter 1994 Newsletter

*December Meeting Recap*

### PNW Section Tours Mackie



Molly Dahlman feeds connector panels for the Mackie mixing consoles into the wave soldering machine.  
Photo by Rick Smargiassi

On a cold, windy, and rainy! December 8, the 37 members and guests of the Pacific Northwest Section met at the world headquarters of Mackie Designs in Woodinville Washington, a suburb of Seattle. Our host was the king of mixers himself, Greg Mackie.

Those attending were treated to a viewing of "The Mackie Home Studio Tour

Video (Clamboats in Paradise)," a factory tour (via videotape so we could see the hordes of smiling faces), a factory tour (on foot, which facilitates ogling naked mixers and twisting their knobs), and last but not least, a sumptuous array of edibles. After

viewing the videos, Mackie invited questions from the group and gave a short history of his contributions to the Northwest audio community.

Mackie's influence in audio dates back to the late 60's when he founded TAPCO and developed a low-cost high-headroom inexpensive mixer aimed at rock and roll bands. He left TAPCO in 1976 and started AudioControl and made a variety of equalizers for the home hi-fi and (later) autosound markets. TAPCO was subsequently acquired by and absorbed by ElectroVoice. At AudioControl, he developed the SA-3050A real-time analyzer, making an affordable analyzer a reality. In 1987 he founded Mackie Designs and returned to his first love: mixers. The phenomenal success of the Mackie CR-1604 and 8-bus mixers speaks for itself.

Afterwards, everyone was given a copy of the Mackie Home Video and a copy of their CD, "Mixed on a Mackie."

Reported by Rick Chinn



Some Mackie staff in attendance. Left to right are: Keith Medley, Technician; Dave Firestone, VP of Sales and Marketing; Jeff Gilbert, Engineering Manager; Paul Larson, Technician; Kevin Howard, Service Dept.; Chuck Jensen, Engineer; Rick Vartian, MIDI engineer; Greg Mackie, President; James Fowler, Marketing.  
Photo by Rick Smargiassi



Greg Mackie shows the LM-3204 line mixer prototype. It has 16 stereo ins by 4 out.  
Photo by Rick Smargiassi



Spectral Synthesis demonstrates their PC-Based Digital Audio Workstation. Pictured from left is Ken Anderson, Chief Technician; Mark Doenges, Vice President of Marketing; Jeffrey Bruton, Technical Specialist; Ted Wolfe, Vice President of Engineering; and Kirk Hilse, Technical Specialist. photo by Rick Smargiassi



Jeffrey Bruton, Technical Specialist, holds up the PC-based mother board with Spectral Synthesis digital audio boards inserted in the bus which allows audio to be recorded onto the hard disks - photo by Rick Smargiassi

### September Meeting Recap

## Spectral Synthesis DAW Shown for PNW

Some 30+ AES members and guests came to Redmond, Washington's well known Triad Studio A for a September meeting on - another DAW! After previous meetings on custom DAWs and Mac-based DAWs, this meeting focussed on a PC-based system from Spectral Synthesis. Spectral is a six year old pacific northwest company, based in nearby Woodinville, WA. A complete workstation was there, as well as other products, many of them opened for inspection. Chairs filled the main floor of the studio and several large computer monitors were set-up so that everyone could see the workstation demonstrations. Jeffrey Bruton of Spectral acted as Emcee, explaining the various aspects of the software and hardware designs. He was assisted by many members of the Spectral Synthesis staff who were also in attendance, including the VP of Engineering, Ted Wolfe. After a full evening, and many technical questions and answers, everyone was invited to a big Spectral open house/party on September 30, at their facility.

Reported by Gary Louie



The Spectral Synthesis Audio Engine Workstation - photo by Rick Smargiassi

November Meeting:

# Computer Control of Sound Systems

It became evident to those who attended the November PNW Section meeting that we are at the dawn of a new era in sound system operation and control.

Bob Moses, Chair of the AES SC-10-3 Information Working Group of the AES SC-10 subcommittee on Sound System Control, and Senior Digital Audio Engineer at RANE Corporation, gave his presentation about computer control of sound systems, and explained just what SC-10 is.

Packing the Jack Straw Productions studio (30+ attendance), Bob had his color laptop computer projecting onto a big wall screen so everyone could see the computer "slides" for the lecture, and the computer displays for the hardware demonstrations.

Bob began with the history of computer control of sound systems, starting with the IED system at Columbus Airport in 1981. MIDI came in 1982, Richmond Sound Design had a system in 1986, and Crown introduced their IQ system in 1987. The AES brought out the PA-422 standard in 1988, Lone Wolf's MediaLink came in 1989, and 1990 brought Crest's NexSys and Intellix's MindNet. Now, in 1993, we hope to have a new AES standard for the industry.



Bob Moses, Senior Digital Audio Engineer with Rane Corporation, demonstrates Crown's IQ, Lone Wolf's MediaLink and Crest's NexSys. Photo by Rick Smargiassi.

Bob then explained just what SC-10 is. The AES SC-10 subcommittee on Sound System Control is working to create open hardware and software standards for computerized sound system control. It has four working groups, SC-10-1, which works on

hardware Local Area Network (LAN) standards, SC-10-2, which works on defining the application protocols, SC-10-3 (Bob's group) which compiles and disseminates

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## A Word from Our PNW Chairperson



Van Browne

Whatever you may think of the much-ballyhooed Information Superhighway, the Information Age is upon us with a vengeance. In our never-know-enough field, the quantity of available data that matters has grown to numbing proportions. Many areas of human endeavor have been forced to split disciplines into sub-disciplines

and then some, all in an effort to keep moving forward.

A quick scan of the Journal of the AES would seem to confirm that many of us have left the mainstream for the pursuit of the esoteric or even the arcane, yet I am continually impressed by the breadth and depth of knowledge possessed by many of our members. There are among us Renaissance Men of Audio, whom we would all do well to emulate. This is the spirit that I believe local sections are uniquely able to foster, due to their inherent flexibility and diversity.

In 1994 it is my hope that the Pacific NW section of the AES can continue to

present its members with a broad range of meeting topics and events, with presentations by individuals at the top of their chosen fields and visits to facilities dedicated to furthering our ability to understand and control the relatively few octaves allocated to us. It is so very important that we learn from those who already know, since truly new information is bought and paid for with the increasingly scarce currency of time. And, the more we know, the more we *can* know. Robert Heinlein once wrote "Specialization is for insects." Let's try to keep our part of the highway relatively bug-free.

### 1994 AES Pacific Northwest Section Officers and Committee Members

- |   |  |   |   |  |   |  |   |  |  |
|---|--|---|---|--|---|--|---|--|--|
| Chair<br>Van Browne<br>Northshore Marketing<br>284-9699 | Vice-Chair<br>Al Swanson<br>Location Recording<br>527-0318 | Secretary<br>Gary Louie<br>UW School of Music<br>543-1218 | Treasurer<br>Terry Denbrook<br>KUOW<br>543-2710 | Committee<br>Dan Mortensen<br>Dansound<br>525-2113 | Committee<br>Tom Stiles<br>TS Audio<br>524-1389 | Committee<br>Allen Goldstein<br>Symetrix<br>282-2555 | Committee<br>Rick Chinn<br>Symetrix<br>282-2555 | Committee<br>Rick Smargiassi<br>Seattle Center<br>684-7191 | Committee<br>Greg Mackie<br>Mackie Designs<br>800-258-6883 |
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Brian Carr demonstrates the Data Glove, which uses various hand movements to change sound system control settings. Photo by Rick Smargiassi.

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### Computer Control of Audio Systems

all SC-10 information, and SC-10-4, which works on a MIDI to PA-422 bridge. PA-422 is an earlier AES standard addressing computer control which needs updating.

Why have computer control? Bob went over some benefits:

- Improved human interface - easy remote control, repeatability and accuracy of con-

trol settings.

- Easy automation of systems
- Security - keeps knob twiddlers in check
- Easy feature upgrades through software
- Easy Integration with other media

Next came the demonstrations. Several small sound systems were set up to demonstrate simple Crest NexSys, Crown IQ, and Lone Wolf MediaLink set-ups. One could watch the computer screen displays and hear the results as volume, EQ and so on were adjusted by manipulating the "virtual" con-

trols. Brian Karr, a Research Engineer at the University of Washington's Human Interface Technology (HIT) Lab, then demonstrated controlling a system with the Data Glove. Hand and finger movements controlled the volume and multi-band EQ.

Evident from the closing questions and comments was that the future potential of computer control of sound systems is big.

Reported by Gary Louie

### Announcements from the FAX Machine

Job Opening: Crystal Semiconductor is looking for a Senior Systems Engineer to interface with Microsoft in the development of multimedia products. Contact Scott Smith of Michael James & Associates in Dallas TX at 1-800-733-1314.

Loudspeaker University: Menlo Scientific is sponsoring the first Loudspeaker University at the Lowell Campus of the University of Massachusetts Center for Recording Arts, Technology and Industry. The three day seminar is meant for people who design speakers. It takes place May 13-15, 1994 and costs \$350, which includes hotel. The program has been endorsed by ALMA, the American Loudspeaker Manufacturers Association. For info, contact Mike Klasco of Menlo Scientific in Berkeley, CA at 415-528-1277.