Superboard Accessory Rack

This unit houses the associated equipment required to interface the board with the speaker system. The standard Showco accessory rack contains four Showco 4-way Master Panel Crossover Units, which are a 4-way electronic crossover with balanced line outputs. The unit features a VU meter, LED overload, mute switch and trim pot on each line output to provide the engineer with the maximum control over the speaker system. This is one of the most important components in the Showco sound system. There are two UREI 1176LN Limiters which are used to limit the stereo outputs of the board, and two UREI 527A 1/3-octave graphic equalizers which are used to equalize the sound system to the room. A patch bay is included to patch the limiters, graphics and other signal processing equipment into the board. Also included is a Kenwood KC 6060 oscilloscope which is used for basic trouble shooting and monitoring the output wave form of the four Master Panel Crossovers. Lastly, a Nakamichi 550 cassette recorder is included to play music before the show and can be patched into the board to tape the performance should the artist so wish. At additional cost. Showco will provide a Roland Space Echo, which is a closed loop, multi-head tape echo with a spring reverb system; an Eventide DDL; and an Eventide flanger.

Mixing Led Zeppelin "Live"

Mixing Led Zeppelin "live" requires a different approach to engineering than does mixing a group like Yes or Genesis. With the latter, the music comes from so many sources that the engineer is required to be very familiar with the music as well as being constantly on his toes in terms of the actual mixing, timing of cues, etc. While the frequency range of these acts is the same, it is harder to get Zeppelin to sound good because of the sheer volume needed to achieve the "correct" level of intensity and energy without, at the same time, compromising a clean mix. No other group taxes the Showco system as does Led Zeppelin, running it to its limits. All thirty channels are used, with fifteen going for drums, four to the keyboards, bass, guitar and Page's Sonic, three acoustic instruments, four vocal mics and three effects returns.

Preparation for a Zeppelin show is both logical and surprising. Showco personnel arrive days in advance of a show, not for the purpose of checking out the acoustics, but to see whether anything has changed in terms of power and rigging. Rigging at the Kingdome is a great problem since it all has to be done through the dome, requiring lots of cable. Except for dressing room facilities which are located at the opposite end from the stage. Showco found the Kingdome to be physically well laid out to handle rock shows. There is good truck access, it's level, has enough power and a very willing building staff. The immediate problem is its seven-second decay rate when empty, which decreases to a "tolerable" 1.5-2 seconds when full. Showco has been fortunate in that the two shows they have done here have both been 65,000 full. As the hall is boomy with low-end rumble. Showco's approach to solving the problem is to overpower the decay through volume and the use of horns to hit the back of the hall.

"I don't think the Kingdome's that bad," says Rusty Brutsche. Though Keny Whitright feels the hall has deteriorated soundwise since they were last here, attributing it to the paint curing on the dome ceiling. "You either have the equipment or you don't, but you can't blame it all on the arena."

Rusty set up the Showco superboard 150 feet in front of the right speaker bank. Unlike Clair Brothers who have a separate snake for indoor and outdoor shows, Showco employs a plugtogether type used both for indoor/outdoor. Brutsche does not mix Led Zeppelin in stereo, feeling that to mix in pure stereo isn't fair to most of the people in the hall. During various parts of the show he will pan for effect, however.

While many groups of comparable or lesser stature will either consult with their concert engineer as to reproducing their recorded sound, or use the same engineer for both functions, Led Zeppelin does neither. Surprisingly, Rusty does not listen to much Zeppelin on record, either. "The sound they get 'live' is not what they get in the studio. It's similar, but 'live' it's so much louder, so much more powerful. They're such an incredibly loud band that I just try to get a nice blend with clarity on everything and distinction between various instruments. The voice is mixed such that it's on top

with the rest behind it." He also does not feel for the most part that studio engineers make good concert engineers. "I've seen a lot of studio engineers come in and spend the whole concert trying to get those exact separations you find in a studio. You can't. It's a whole different approach to engineering ('live' engineering) and most studio engineers can't do it."

While he handles the main mix and two Showco personnel the monitor mixes, Benjy, a Zeppelin roadie, manages all of the vocal effects. Zeppelin in particular uses a lot of echo, a Harmonizer and DDL in their "live" show.

Hours prior to the show it was discovered that all of the guitar and power cords had been left behind in Dallas, requiring Keny to slave over a hot soldering iron for four hours. Added to that was the discovery that the newly purchased JBL replacement equipment was defective, the problem being "open" drivers. Truck space limits the amount of spare equipment possible and when you're playing a hall this size, you need all the gear you can carry. When the doors opened at five, however, everything was ready to go.

There was much speculation among Showco staff as to when the show would begin. While scheduled for 8 P.M., those at Showco who have traveled over the years with Zeppelin know them to have a notorious reputation for tardiness. To pacify the growing crowd, Rusty was running tapes of different groups from the Nakamichi 550 into the system at low volume. When AWB's version of "Work To Do" came up. Rusty boosted the system slightly to test it out. The kick drum and bass that start the tune off came through the system so clear, sharp, loud and powerful that it not only brought a great cheer from the crowd, but brought out the separations in that song as I've never heard them. He wasn't kidding when he said 30,000 bass watts!

At 8:20 the house lights went out and the fireworks and matches went up. As Zeppelin took its time tuning up and Robert Plant complained about the audience not being exuberant enough (!)("We are, after all, Led Zeppelin, and how often do we come to town?"), Keny's wife was busy passing out cotton to place in their ears to all at the board. To all, that is, except Rusty Brutsche. "I don't use it!" What'd he say?

