

## **A JBL INSTALLATION**

## WARNER HOLLYWOOD STUDIOS STATE OF THE ART IN FILM POST-PRODUCTION

Warner Hollywood Studios in Hollywood, successors to Samuel Goldwyn Studios, has a reputation as one of the city's best facilities for post-production work in motion pictures and television. While all of their facilities are first-rate, their sound deserves special attention.

Don Rogers, Technical Director, and John Bonner, Chief Engineer, have both been active in the affairs of the Society of Motion Picture and Television Engineers and the Academy of Motion Picture Arts and Sciences, and both men appreciate the advances in cinema sound which JBL developed in the early eighties.

When the new Goldwyn Sound Facility was being built in 1983, John Bonner wanted the best sound available in the new dubbing theaters. In his words, "You can't create a truly outstanding soundtrack without being able to hear everything accurately. That's why JBL's clarity was the first thing that impressed me. And with JBL, I can rest assured that our sound track will sound just as good in the theaters as it does in the studio."

Dubbing Theater A is equipped with JBL 4675A systems, making use of model 2360A Bi-Radial<sup>™</sup> high-frequency horns and model 2445J compression drivers. The low frequency portion of the system consists of model 4508 ported low frequency enclosures with model 2225H transducers. This component array is mounted in a large flat baffle just behind the screen and is biamplified, using the JBL 5234A dividing network. The behind-the-screen transducer complement is noted for extremely flat power response, and the system, before equalization, exhibits response flat within three dB of the ISO standard from 40 Hz to 12 kHz.

The surround array consists of flush mounted bookshelf loudspeakers on both sides and the back wall.

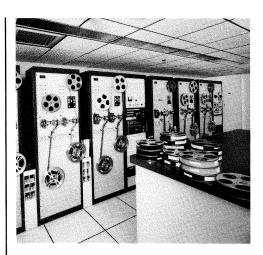
As can be seen from the accompanying sketch, the entire loudspeaker chain can be bypassed around the Dolby processor when playback directly from the console outputs is desired.

The console in Dubbing Theater A is a Harrison design and can accommodate three mixers to cover the simultaneous requirements of sound effects, dialog, and music in producing the final product.

Architectural and Acoustical Design:

Warner Hollywood secured the services of Jeff Cooper Architects for room design and acoustical specification. Dubbing Theater A is about the size

of a 175 seat theater, typical in scale to what is found in most cinema complexes



View of machine room for Dubbing Theater A.



View of Dubbing Theater A

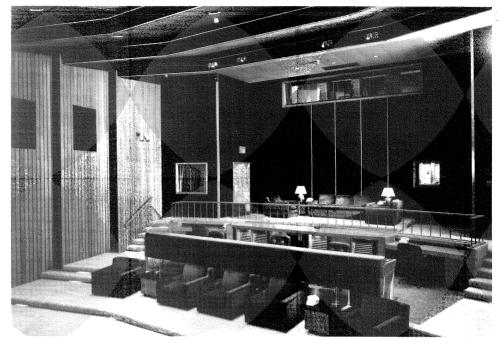


(Acoustic design © Jeff Cooper Architects, AIA, Los Angeles, 1983).

today. Visually, the room is warm, making use of splayed wall sections of natural stained wood. Acoustically, the space is on the "dry" side, and this is by intent. The room cannot be allowed to interfere with the spatial details of multi-channel sound mixing. Effects in particular must be clearly heard from their intended directions, and a live ambience in the room would work counter to this. Wall and ceiling finishing provides nearly constant sound absorption through the frequency spectrum, and this ensures that reflected sound will have virtually the same spectral balance as direct sound. Splayed surfaces throughout ensure that flutter echoes will be eliminated.

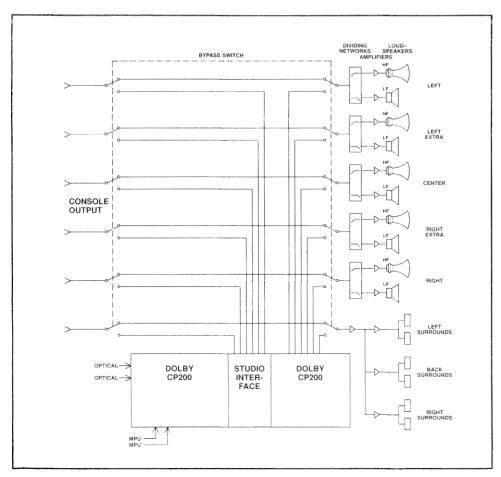
The room is extremely well isolated acoustically from adjacent work spaces as well as the rest of the lot, and air conditioning duct work provides enough isolation so that air handling noise is virtually inaudible. Overall, the residual noise level in the room is NC 20, and this is ideal for film and television mixing purposes.

The combination of function and appearance is a felicitous one, and it is easy to see why the room is booked nearly continuously.



View toward rear of Dubbing Theater A

(Acoustic design © Jeff Cooper Architects, AIA, Los Angeles, 1983).





JBL Incorporated 8500 Balboa Boulevard Northridge, California 91329, USA

Prestige-Warner Hwd/3-88

Block diagram of monitor system in Dubbing Theater A.