

A JBL INSTALLATION

JBL AT THE LYRIC THEATRE IN BALTIMORE

The Lyric Theatre in Baltimore, Maryland, was opened in 1894, and over the years it has gained a reputation as one of America's most successful early concert halls. Such conductors as Monteux, Munch, Ormandy, Reiner, and Stokowski have rated it as one of the three finest halls in the country. For years it was the home of the Baltimore Symphony Orchestra.

In 1982, the Baltimore Symphony Orchestra moved into its new home, the Myerhoff Concert Hall. Management of the Lyric Theatre felt it necessary to make a number of changes in the hall in order to make it attractive for opera, musical comedy, and other activities. Among these changes were enlarging the lobby, installing air conditioning, improving sightlines under the balconies, and installing a speech/music reinforcement system. The firm of Klepper Marshall King Associates, Ltd., White Plains, New York, was chosen to design the new system and to make general acoustical recommendations.

A biamplified central array was located just below and in front of the proscenium, with all elements painted to match the interior of the hall. The array consists of two JBL 2365A Bi-Radial™ horns for far coverage and four JBL 2360A Bi-Radial horns for mid and near coverage. These system elements cross over at 800 Hz into a vertical arc array of six JBL 2202J low frequency trans-

ducers mounted in a custom designed enclosure.

The system is supplemented by rear balcony overhead 300 mm (12 in) coaxial loudspeakers and numerous 112 mm (4.5 in) loudspeakers under the balconies. These supplementary loudspeakers are all on time delayed feed for proper blending with sound from the central array. In addition, two column loudspeakers are located at the sides of the proscenium to provide high frequency coverage for the frontmost seats of the side balconies.

The acoustical consultants specified that the response of the main array be within ± 3 dB from 80 Hz to 2 kHz, decreasing 2 dB per octave from 2 kHz to 10 kHz. Peak level requirements were 103 dB SPL in the house and 98 dB SPL on the stage. The system easily meets both equalization and level criteria.

Klepper Marshall King Associates worked with Baltimore architects Richter-Cornbrooks-Gribble on acoustical aspects of the installation. Muller Associates of Baltimore were the mechanical engineers, and, working with the acoustical consultants, assured a quiet air handling system.

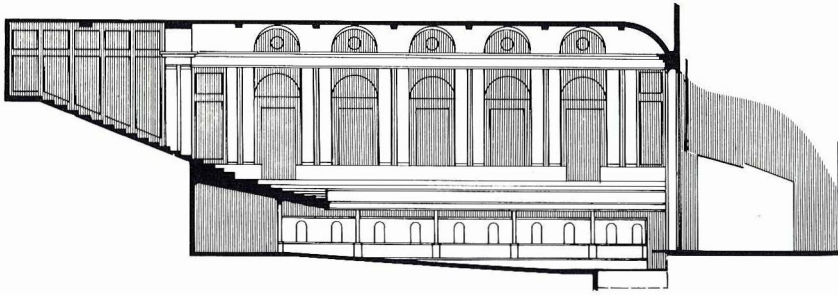
The entire sound and communications system was installed by Audio Technical Services of Vienna, Virginia.



View of central array

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Section View of the Lyric Theatre



Section view of the Lyric Theater (from L. Beranek, "Music, Acoustics & Architecture," John Wiley and Sons, New York, 1962)

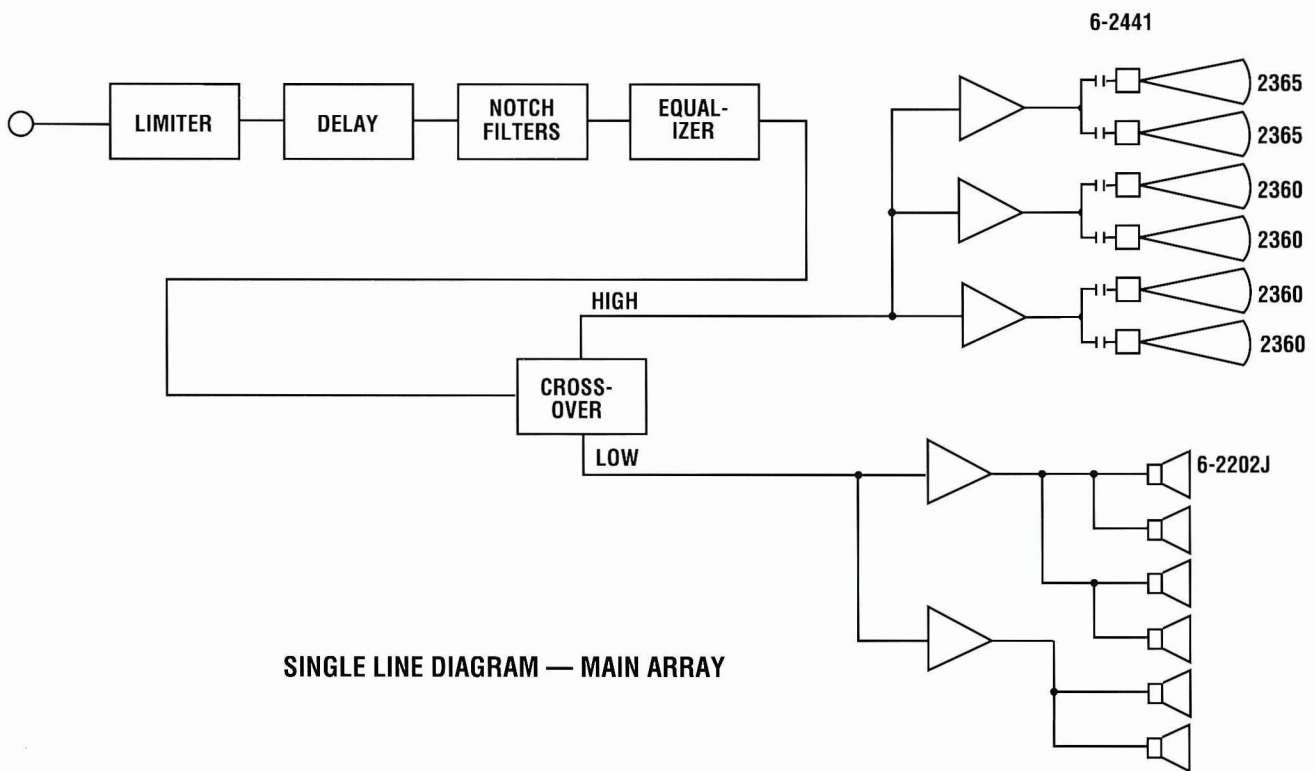
CREDITS:

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White Plains, New York

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Richter-Cornbrooks-Gribble,
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Muller Associates, Baltimore,
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Sound System Installation:
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