



## A JBL INSTALLATION

# JBL AT THE FINGER LAKES PERFORMING ARTS CENTER

The Finger Lakes Performing Arts Center is located on the campus of the Community College of the Finger Lakes in Canandaigua, New York. The large semi-outdoor structure is the summer home of the Rochester Philharmonic Orchestra and is used throughout the summer for a variety of programs. There are 2600 indoor seats, and the sloping lawn area to the rear will accommodate up to 10,000 patrons in a more informal outdoor setting.

For normal symphonic performance, the natural acoustics of the shell are sufficient for indoor listeners. However, those patrons seated on the lawn require sound amplification. For pops activities, with vocal soloists and jazz groups, high-level indoor amplification is needed as well. Thus, there are two sound reinforcement systems, the indoor system and the lawn system.

Acoustical consultants for the job were Klepper Marshall King Associates, Ltd., of White Plains, New York, and all aspects of installation were carried out by Philip Clark of Diversified Concepts Incorporated of Marcellus, New York.

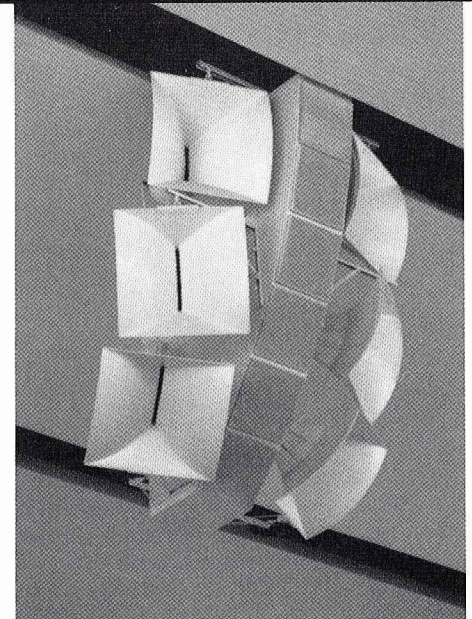
The central array is composed of a custom designed sealed enclosure which contains six JBL 2225H transducers in a vertical arc array. Far coverage requirements are met with a pair of JBL 2365A Bi-Radial™ horns, while mid and near coverage requirements are met with four JBL 2360A Bi-Radial horns. All high frequency horns are driven by JBL 2445J compression drivers.

There are four lawn systems located in the structural fascia which looks out over the lawn seating area. Each of these systems is composed of a JBL 4508 enclosure with two JBL 2225H low frequency transducers and a single JBL

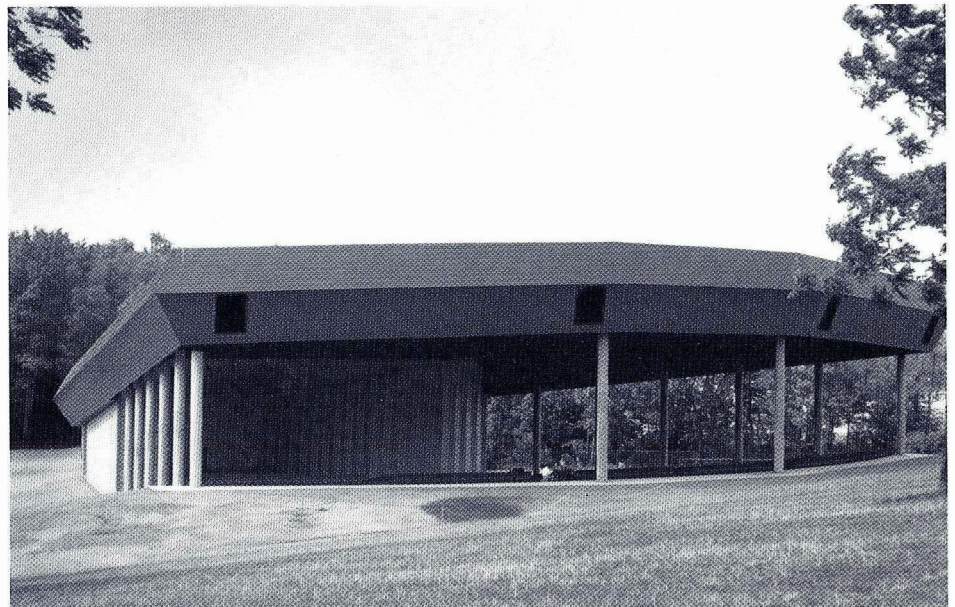
2360A horn with a JBL 2445J driver. All systems are biamplified and crossed over at 800 Hz.

Performance requirements set by the acoustical consultants called for response which is flat from 40 Hz to 1 kHz, falling off above 1 kHz at 2 dB per octave out to 12.5 kHz. The response envelope is  $\pm 3$  dB, and both indoor and lawn systems meet this specification. Level requirements called for peak capability of 115 dB SPL indoors and 105 dB SPL on the stage and on the lawn.

The systems have been accepted with enthusiasm, and Earl George of the Syracuse Herald American had this to say: "Facility May Prove Too Successful..."



Detailed view of central indoor array.



Front view of Finger Lakes Performing Arts Center. Note the locations of the four lawn systems in the lower fascia of the structure.

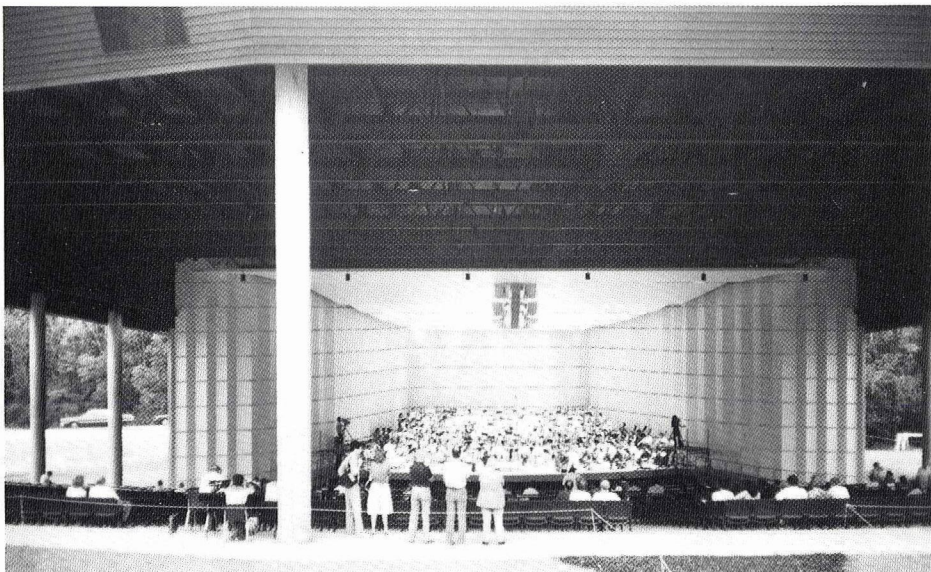
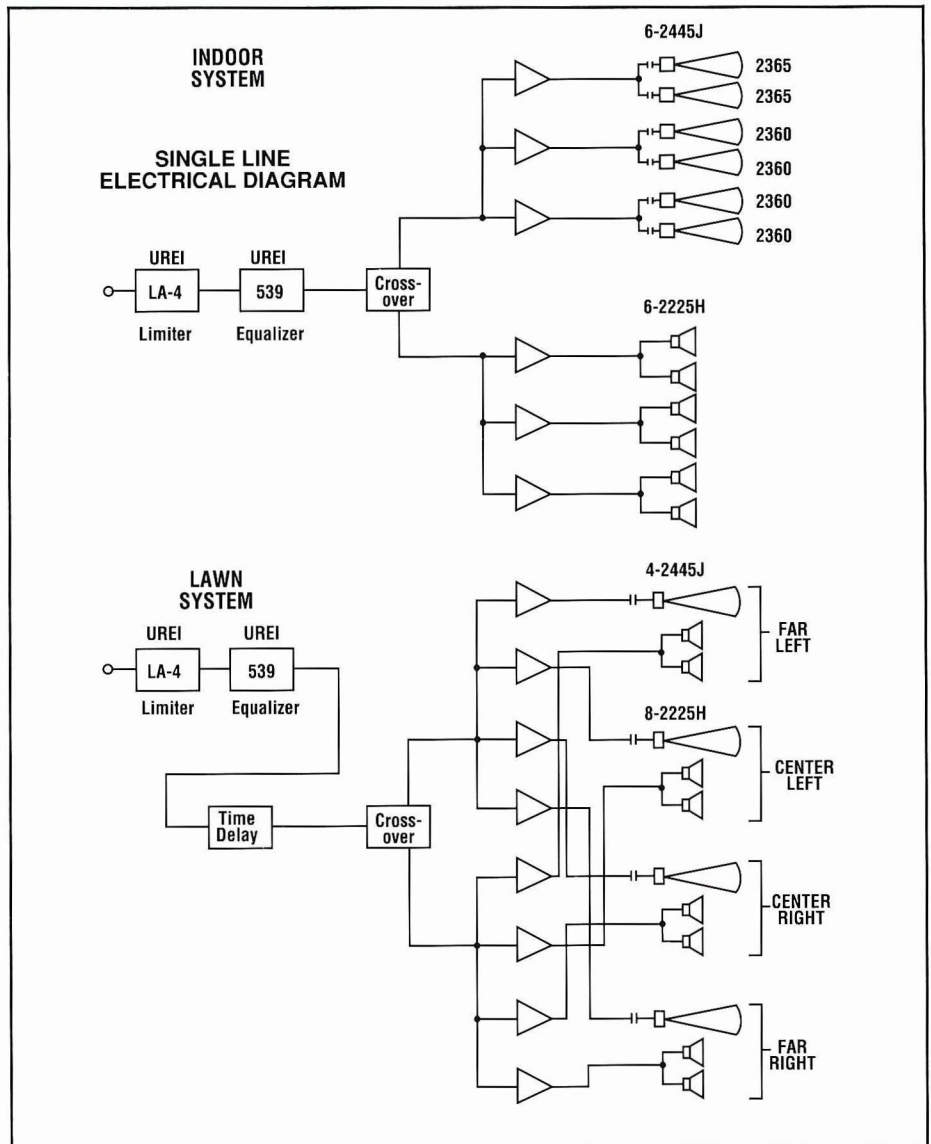
**JBL**



The acoustical consultant, Klepper, Marshall, and King of White Plains, and Diversified Concepts of Marcellus, who supplied the acoustical (sound) equipment, must have done something very right. The sound inside the shell was bright, but not over-bright... however, the sound outside was even better."

**MILESTONES:**

- 1968-1970 Study of open concert shells
- 1970-1977 Site evaluation
- 1976 Summer Performance Board established to develop a summer program and choose a site
- 1979-1982 Visiting other facilities and preparation of feasibility study
- 1982 Funding and site secured; job put out for bid
- Fall 1982 Construction begins
- 14 July 1983 Construction completed
- 16 July 1983 Opening ceremonies and concert



View of stage as seen from the rear of the shell.

**CREDITS:**

- Sound Contractor and Installation:**  
Diversified Concepts, Incorporated,  
Marcellus, New York
- Acoustical Design Consultant:**  
Klepper Marshall King, Ltd., White Plains,  
New York
- Architect and Engineer:**  
Handler and Grosso, Rochester, New York
- Owner:**  
Ontario County of New York State
- Management:**  
Rochester Philharmonic Orchestra



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