

Polar Focus® and the Motor Zbeam® Save Thousands on Installation.

Outline of Rigging Gear for St. George Theatre, Staten Island NY

<http://www.stgeorgetheatre.com>

Typical Cost of Conventional approach for St. George Theatre

- 4 one-ton chain hoists: ~\$2500 each
- 1 four-way hoist controller package: ~\$5000
- No pan control
- Crude tilt control

Total cost: ~\$15,000

Cost of Polar Focus® approach for St. George Theatre

- 2 half-ton chain hoists with double length chains: ~\$2500 each
- 2 MZB kits with adaptor bar for Vertec: ~\$1300 each
- Includes infinite pan control
- Includes infinite tilt control

Total cost: ~\$7,600

Savings of ~\$7,400 with superior performance

Initial Conventional Audio Concept

The initial audio design required two line arrays consisting of 9 JBL Vertec loudspeakers with a total weight per cluster of 1504lbs. The AV contractor had planned to install each of the two line arrays using two 1-ton chain hoists each. It was planned to use the conventional method with one hoist at the front of the line array grid, and one at the rear of the line array grid. The line array tilt would be controlled by operating one of the two chain hoists up or down in small increments. The AV contractor would also need to supply an expensive four-way hoist controller to raise the cluster after aiming. There was no method or controlling the pan angles of a cluster without lowering it to the stage floor, and then re-rigging one of the chain hoists to a new location. Additional challenges included that there was only one roof truss that ran left/right over the stage, where the motors needed to be aligned upstage/downstage. Also theatre's decorative ceiling meant that the holes to suspend the line arrays had to be correctly drilled the first time, preventing any useful control of the pan angle by re-rigging one of the hoist points.

Polar Focus® Proposal (accepted and installed)

Polar Focus proposed using the Motor Zbeam® with an XY Grid® System Vertec adaptor bar for attaching to the VT4888AF line array frame. This kit provided infinitely adjustable tilt control, infinitely adjustable pan control, and only one chain hoist was required instead of two per line array. The double purchase Motor Zbeam 10" diameter chain pulley prevents the line array from 'free spinning,' which occurs when supporting an array with a single hoist point. With only one hoist per line array, no expensive hoist controller was needed. Each cluster could be raised and lowered using a 'pickle' single hoist control pendant. Because of the double purchase pulley, the cluster can be lifted with a ½ Ton hoist due to the 2:1 mechanical advantage the pulley creates.