

Phantom - The Las Vegas Spectacular relies on Delta's Motion Controller

At a Glance

- **Project:** Delta's motion control adds spectacular special effects on stage at the Venetian in Las Vegas.
- **Company:** Atlantic Industrial Technologies
- **Location:** Islandia, New York
- **Challenge:** Move the Phantom's hidden 1,500 pound cage 84 inches in one second while keeping the actors safe during each performance.
- **Solution:** Delta's RMC75E with closed loop motion profile
- **Benefits:** One -of-a-kind special effects reliably thrill audiences and offer the production company safe systems.

Summary:

Delta motion control adds to the spectacular special effects in *Phantom—the Las Vegas Spectacular* at the Venetian Resort Hotel Casino in Las Vegas. The nightly show has a stunning new home in an architecturally impressive theatre inspired by the Opera Garnier in Paris.

Challenge:

Delta and AIT's challenge was to control the motion of a 1,500 pound cage that suddenly appears to trap the angered Phantom's foe during the stage production. The cage moves 84 inches upward from below the stage floor in just one second. Each night it reliably returns to the exact position at its home underneath the stage following the dramatic scene.

Solution:

AIT applied Delta's RMC75E to control the motion because its extremely fast closed loop motion profile is able to control the heavy cage. AIT's design also monitored key safety parameters of the system. The AIT application used an HMI interface for trouble free operation with the simplicity of only up and down buttons to control.

Benefits:

Typically, theatrical scenery that requires the strength and control of hydraulics has been limited to slow moving lifts and scenery animation. With the use of Delta's RMC75E, *Phantom—the Las Vegas Spectacular* is able to have never before seen special effects during its unique 95 minute show. After each use, the cage returns to its precise home position beneath the stage floor. Numerous safety provisions in this AIT designed system keep the actors safe and allow the show to go on each night.

"Delta's controller consistently delivers the extremely fast motion profile for the cage prop."

-Tom Ferrara, AIT

