

Technical Specifications

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| Projector System: | <p>Super MediaGlobe II, manufactured by Konica–Minolta Planetarium.</p> <p>The Konica–Minolta Super MediaGlobe II, fulldome, digital projector was installed in 2015. The Super MediaGlobe II covers the entire surface of our 44 foot (13.4 meter) diameter dome with full color images, animation, and the starry sky.</p> |
| Sound System: | <p>(6) JBL VRX932LAP 12–inch two–way line–array speakers.</p> <p>(2) JBL VRX918SP 18–inch powered flying subwoofer speakers</p> <p>Soundcraft FX16ii 16–channel Mixer.</p> <p>Installed in June of 2013 by Allen Visual Systems, Inc. of Buffalo Grove, Illinois.</p> |
| Seating: | <p>93 BG250 Planetarium chairs by Seating Concepts are arranged in a unidirectional configuration, tiered 20 degrees.</p> |
| Projection Dome: | <p>44–foot / 13.4 meters in diameter dome subtending 165 degrees from center of curvature, tilted 25 degrees.</p> <p>The projection surface of the vinyl–clad aluminum dome is 23 percent void for acoustic performance and painted 36 percent reflective to minimize cross bounce.</p> <p>The dome is suspended from the roof, has unbeveled lap seams, and was custom manufactured by Northern Illinois Engineering of Schaumburg, Illinois (If you know someone who was with this firm, we are looking for architectural drawings for the dome itself).</p> |
| Laser Projector: | <p>Voyager V-170WC Laser Display System, custom manufactured by Aura Technologies Inc. of Chicago, Ill. Individual components include the following:</p> <ul style="list-style-type: none"> • Color Pro 3.0 watt "white light" argon-krypton ion laser, generating a full color spectrum from deep red (676 nm) through ultra blue (457 nm), manufactured by <i>Lexel Laser, Incorporated</i> of Fremont, California. Utilizing a poly-chromatic acousto-optical RGB color modulation system, it can display over 18 quintillion (1.8×10^{18}) color combinations. • High-speed moving magnet galvanometer-based graphical scanning system, which is capable of a scan rate of over 30,000 points per second. • DMX-512 (lighting industry standard) automated control system software protocol. • 26 special optical effects, using state-of-the-art holographic diffraction gratings, spatial light modulators and wave front distortion filters. • Precision digital optical special effects controls, driven by six microprocessors utilizing 99 discrete transistor circuits with pulse width modulator motor speed controls and stepper motor positioning. • FostexD-2424LV 24-track digital recorder for audio and laser system programming playback. • Twin remote fiber optic driven remote scanning devices containing moving iron galvanometer mechanical beam deflection technology for aerial laser beam effects in full color (currently offline). • 32-channel operator control console with auto/manual performance control. • 8-channel, 20-bit digital playback system using S-VHS tape storage. • Laser display system can be either fully automated or overridden by manual operator control at any time. • Theatrical hazer (fog machine) used to add scattering dispersal effects into the atmosphere enhancing the aerial laser beam effects (currently offline). |
| Inset Video Projector: | <p><i>Sony</i> VPL–S900U data projector.</p> |
| Building: | <p>(10,800 square feet, including dome theater, exhibit lobby, gift shop, four offices, four classrooms, storage, circulation and mechanical space.</p> <p>Cost: \$1.1 million.</p> <p>Opened: June 23, 1984.</p> |