Overview and Features

Immersive Display Solutions and Raydon Corporation present MIDDS, a Motion-Integrated Dome Display System. The MIDDS display derives out of the success of the IDSI MiniDome and VisionStation 2 products, providing the greater HFOV and visual fidelity of the MiniDome with the compact footprint and personal workstation-like display environment of the VisionStation. This hybrid solution is coupled with the Raydon full motion platform and cockpit, raising the physical fidelity of the MIDDS well beyond the simple motion cueing that is typical for this class of simulators.

• **Compact Training Solution** – Physically integrates a multi-channel immersive display environment with a motion platform experience.

• **Immersive Display System** – Designed to provide a wrap-around wide FOV 220° H x 55° V seamless image, eliminating any bezel distraction and view occlusions typically associated with using multiple flat-panel displays.

• **Multi-Channel Projection System** – Design and use-case flexibility is provided by enabling configurations using lower resolution 1080P and WUXGA projectors, up to WQXGA and 4K UHD projection systems.

• **Integrated Motion System** – Visual Display system is coupled with a 3-DOF motion platform resulting in a high-fidelity, small footprint motion-based system that is capable of being installed stand-alone, or up to four units in a trailer configuration.

Primary Markets

- Vehicle Simulation
- Flight / UAS Simulation
- Fast Boat Simulation
- Location-Based Entertainment

Technology Demonstration - MIDDS
Features & Benefits

- **Unprecedented Black Levels** – Crystal LED display takes advantage of unique ultra-fine 0.003 mm² RGB LED's so that more than 99% of the surface area is black, resulting in incredible black levels.

- **Incredible Contrast** – With a Contrast Ratio of more than 1,000,000:1, far beyond conventional surface-mount LED, the display minimizes the reflection of ambient light. When ambient light is low the picture looks even more amazing.

- **Extraordinary Color** – To support the latest visualization and real-time content, the CLED display achieves an uncommonly wide color gamut exceeding 140% of sRGB.

- **Seamless Image with 180 Viewing Angle** – Each CLED module fits together without bezels or any gaps, and the module-to-module color uniformity is outstanding, resulting in amazing images delivering a viewing angle close to 180 with no brightness drop-off or color shift.

- **High Frame Rates** – The CLED display delivers razor sharp motion by supporting 120Hz frame rates.

Primary Use Cases

- Mission Planning & Rehearsal
- Command and Control
- Research & Development
- Simulation and Training
- Visualization