

Design and Integration Experts for Curved and Spherical Displays



Tactical Floor

Overview

Immersive Display Solutions Inc. (IDSI) offers a family of overhead multi-projection Tactical Floor display solutions that are utilized to present large format data. Tactical Floor combines IDSI's years of experience with projection, screen and content management technology to create this high utility display.

Tactical Floor is designed to be flexible and can be configured to accommodate many different environments and planning requirements. The design is scalable in terms of display size, resolution and brightness.

The system is comprised of four key components: projection surface, projectors, truss structure to support the projectors and mirrors, and the video wall controller to manage content. Fiber optic video cables, power cables and ethernet network cables are all managed via an integrated cable management system that allows the truss to be lowered for maintenance of the projectors and mirrors.

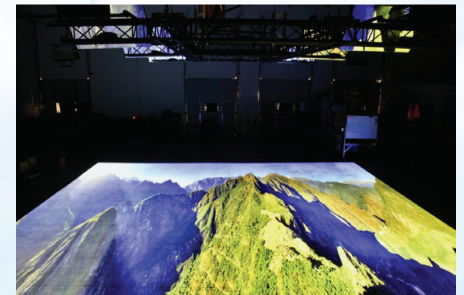
Tactical Floor delivers the benefit that larger models reinforce the participants' perception of unit positions on the terrain by allowing them to walk on it.

Component Highlights

The Tactical Floor is equipped with professional grade, single-chip solid state (laser or LED) projectors that have a life of up to 60,000 hours. Our base

Primary Applications

- Rehearsal of Concept drills
- Digital Terrain Visualization
- Mission Rehearsal
- Situational Awareness
- Mission Planning



projector features 5,000 lumens at WUXGA resolution with native resolution of 1920x1200.

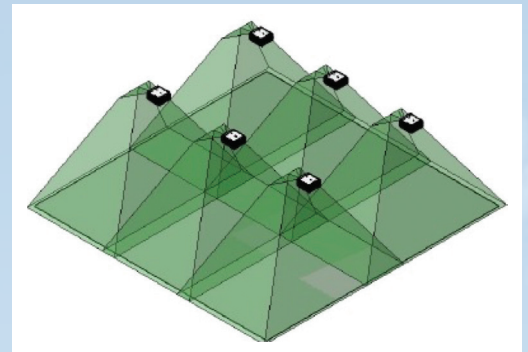
The Tactical Floor comes with true “video wall” functionality for maximum flexibility to display a wide range of battle and mission planning content. The base system supports four (4) input sources and up to six (6) outputs.

The system is also equipped with camera-based calibration to align and blend the projectors to ensure optimal performance. Using the Constant Light Output (CLO) functionality of the projection system, the Tactical Floor display retains constant brightness and color over longer periods of time.

Tactical Floor - Sample Configuration

IDSi recently completed a 100 square meter Tactical Floor display for Naval battle planning. The solution included:

- 10-meter x 10-meter floor display
- Six (6) WUXGA projector display – 3200x3200 net resolution
- True “video wall” functionality
- Brightness – 10 Ft-L
- Luminance – 22cd/m²
- Contrast – >100:1
- Resolution – 3.1 mm/pixel
- Power consumption without hoists – 7,000W



Light Paths for Overhead Projectors

Available Options

The Tactical Floor is designed to be flexible and scalable to meet customer requirements. The following are some of the available options:

Increased display size – Tactical Floor is scalable for area covered by adding additional projectors.

Increased resolution – Tactical Floor base resolution is 3.1 arc minutes/pixel and can be configured to deliver higher resolution using higher resolution projectors.

Increased brightness – Tactical Floor has a base brightness of 10 Ft lamberts and can be configured to deliver higher brightness.

Expandable Video Wall inputs and outputs – Specific inputs and outputs of the Video Wall Controller can be scaled to meet specific needs.

Active Stereo – To view rehearsal data in 3D, the Tactical Floor can operate in active stereo mode if the content is 3D ready.

About Immersive Display Solutions

IDSi partners with its clients to design and integrate a range of both commercial and custom-designed cylindrical, panoramic and spherical visual display products including the necessary ancillary services to deliver cost-effective immersive simulation and training experiences to military and commercial customers worldwide.

