

FINAL DESIGN GROUP

VIRTUAL PRODUCTION STAGE // LAS VEGAS, NV

FDGtv.com

Stage Overview

A professional LED environment engineered for high-fidelity ICVFX and immersive real-time workflows. Built around a 40' x 40' truss structure with a 20' roofline, the facility provides a precision ecosystem for cinematic innovation.

IN-CAMERA VISUAL EFFECTS (ICVFX)

ICVFX represents the pinnacle of virtual production, allowing for real-time 3D backgrounds to be rendered in-camera with perfect parallax and depth of field. This technology provides natural lighting and realistic reflections directly on set.

SPATIAL ENVIRONMENT

Stage Perimeter	40' x 40'	Mobile Reflection Wall	15' x 15' (3mm)
Roofline Height	20' (Clearance)	Overhead Ceiling	Low-Res Ambient
Primary LED Wall	49.2' x 13.1'	Structural Rigging	Overhead Truss

CREATIVE INTEGRATION

UNREAL ENGINE NATIVE

Support for real-time 3D environments and multi-user ICVFX cinematic workflows.

RESOLUTE ARENA

High-performance media server for motion graphics and frame-synced 2D plates.

RIGGING & STUNT CAPABILITIES

Rated overhead truss system specifically for high-load rigging, camera cranes, and professional wire-work stunt choreography.

ENGINEERING

INFRASTRUCTURE & INTEGRATION

Las Vegas, NV

DISPLAY ENGINEERING

Native Resolution	5880 x 1536 px	Internal Refresh (PWM)	7600 Hz
Peak Brightness	1000 Nits	Resolution (Full)	Up to 60 Hz
		Resolution (Half)	Up to 120 Hz

TRACKING & SYNC

Architecture	OptiTrack Full Volume Capture
Primary Array	6x Prime 22 Precision Cameras
Active Tracking	OptiTrack CinePuck Integrated
Optic Control	Full FIZ (Focus, Iris, Zoom) Data
Master Sync	Full System Genlock Architecture

TECHNICAL ADVANTAGES

MASTER GENLOCK ARCHITECTURE

Ensures perfect phase alignment between the LED volume and the cinema camera shutter, completely eliminating scan-line artifacts and dark-level pulsing.

GOLD TRACE COLOR FIDELITY

Utilizing gold traces ensures superior electrical and thermal stability, guaranteeing 100% color accuracy across the entire 49.2-foot span without drift.

SPHERICAL REFLECTIVE LOGIC

Synergy between the overhead ceiling and mobile 15ft wall provides realistic specular hits for cinematic surfaces like vehicles, helmets, and glass.