

TRUE Q[®] DYNAMIC MOTION SEAT SYSTEMS



TRUE Q[®] DMS

DYNAMIC MOTION SEAT

Patent Pending
"Realistic Cueing, Realistic Training"

PRODUCT SHEET



ACME TRUE Q[®] Dynamic Motion Seats



All Electric Solution - True Q[®] Dynamic Motion Seats (DMS) Patent Pending

The ACME DMS is a cost effective method of providing motion cues to a pilot or other vehicle operator. The seat accurately simulates the inertial cues experienced in the operational equipment whether it be an aircraft or any other platform. The ACME system offers simplicity and proven reliability of an all electrical system that plugs right into the wall. No pneumatics, no leaks, no compressors. The ACME True Q[®] DMS difference is the various systems in the field; it's robust, reliable, and proven.

Supported Seat Types

- **Fighters**
 - F-16 (ACES II)
 - F-15 (ACES II)
 - A-10 (ACES II)
 - F-22
 - F-35
 - M346 (Mk-16)
 - T-50 (Mk-16 Variant)
- **Rotary Wing**
 - Apache AH-64
 - H-60 G/M/R
 - CH-146/7
 - NH90
 - Bell 212
 - V-22
- **Surface Vehicles**
 - Armoured Vehicles
 - Wheeled Vehicles
 - Tracked Vehicles
 - Rail Vehicles
 - Watercraft

Cueing Effects

- **Acceleration Cues**
 - Vertical Acceleration
 - Lateral Acceleration
 - Longitudinal Acceleration
 - Landing Gear Deflection
 - Roll Tilting
 - Pitch Tilting
 - Roll Rate Variation
 - Boat Deck Swell
 - Hoist/Sling Loads
- **Vibration Cues**
 - Main Rotor Effects
 - Critical Failures/Events
 - Turbulence
 - Tail Rotor Effects
 - Buffet
 - Taxiing
- **Shock Cues**
 - Touchdown
 - Weapons Release
 - Collisions
 - Tire Bursting
 - Emergency Situations

Benefits

- Full Six Degrees of Freedom
- Fluid/Instantaneous Cueing
- Ethernet Interface
- All Electric Solution
- Self-Contained Motion Equations
- Does Not Cause Sim Sickness

Features

- Standard US/Europe Wall Power
- Quick Integration
- Simple Ethernet Interface
- Real-Time Dynamic Tuning
- DMS IOS Manager

“The Dynamic Motion Seat provides high fidelity dynamic motion cueing in a training environment that provides students with realistic feedback related to positional and situational aspects of the flight envelop.”

USAF Research Laboratory

