

D-BOX

**MAKE SURE THEY'RE READY
WITH MOTION SIMULATION
FOR CRITICAL OPERATIONS**

Enable operators to achieve maximum readiness. Develop their reflexes and muscle memory with an affordable COTS motion system that integrates seamlessly with the world's best simulation applications.

D-BOX develops state-of-the-art COTS (Commercial off-the-shelf) motion technology for training and simulation applications. Our motion systems are used anywhere people need to experience kinesthetic training for critical operations – army, air force and navy training and analysis. Affordable and easy to integrate, D-BOX technology creates true-to-life, immersive motion effects when paired with high fidelity simulation engines.





Photo courtesy of the U.S. Department of Defense

SOLVING THE PSYCHOMOTOR REFLEXES TRAINING PUZZLE

Quickly and affordably deploy simulations that develop critical psychomotor reflexes

Solid training is mission critical. People need to experience realistic scenarios to fine tune their psychomotor reflexes for critical operations. Given today's budget constraints, training on real equipment in the field has become less accessible. How do you provide engaging and true-to-life critical operations experience replicating military equipment and platforms?

You're looking for an affordable and easy-to-deploy simulation technology that integrates with commercial off-the-shelf software and provides true-to-life simulations of critical operations.

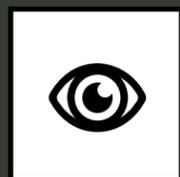
The vast majority of learners are multi-modal; they need kinesthetic cues combined with different types of information and sensory input to improve the success of their training.

“ We see D-BOX as a strong technology partner for an industry facing new economic challenges and looking for innovative solutions to improve trainees' engagement and simulators' quality. ”

- Nicole Verkindt, Founder & President, The OMX

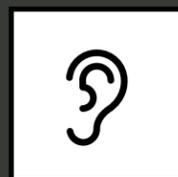
EFFICIENT
TRAINING
SIMULATOR

=



Visualization

+



Sound

+



Instructions

+



Motion

What if you could easily add true-to-life motion to your chosen simulation engine?

DEFINING THE OPTIMAL MOTION SOLUTION

Augment their readiness

The simulation and training community is long overdue for an agile motion solution that easily integrates with the world's best simulation engines. The optimal system would be affordable without compromising the richness of the learner's experience – one that trains muscle memory by fully engaging operators in motion simulations.

Integrating new technologies is always a challenge. What if you could easily integrate a COTS motion system into your favorite simulation engine to quickly deploy

state-of-the-art motion simulations? What if this motion system could replicate any texture to resemble real experience in the field – on land vehicles, helicopters, gunnery stations, or any other type of equipment – with astonishing accuracy?

The end result would be an affordable alternative to your existing simulators, one that enables you to quickly roll out scenarios that engage operators' psychomotor reflexes for critical operations in the field and leverage motion even where you thought cost would preclude it.



Photo courtesy of the U.S. Navy

“ When investigating simulation to support training, it's often believed that the more money you spend on the simulation system and the more degrees of freedom you have, the better the outcomes you get. But Land Division's research shows that, depending on the task that you're trying to perform, there is a different threshold at which some motion is enough, more motion is effective, and any more than that is too much. Our understanding is that using D-BOX in this manner allows us to investigate and comment on the sweet spot for the return on investment in immersive technology. ”

- Glen Pearce, Australian Department of Defence, DSTO, Lab Manager



Photo courtesy of the U.S. Navy

EASILY INTEGRATE THE D-BOX COTS MOTION SOLUTION INTO YOUR SIMULATION TRAINING ARCHITECTURE

A state-of-the-art motion system, our technology seamlessly integrates with industry software and architectures, ensuring quick deployment and low maintenance. D-BOX systems are equally compatible with industry simulation software and serious games to create fully immersive simulated training experiences.

CONTROLLED. EFFICIENT. ADAPTED.

Hardware

D-BOX motion hardware can be integrated into a seat, platform, or other surface to simulate a range of textures and scalable axes of movement. Our motion systems are evolvable and scalable. We can help you select the optimal arrangement of actuators for your application, ensuring you deliver on budget and on time.

Software

For simulation, D-BOX interactive software uses motion algorithms to respond to user commands. Motion signals are sent to our motion controller, which decrypts the signal and sends the queue to our motion actuators. D-BOX motion specialists support your integrations to replicate all vehicle movements from your simulator, including vehicle position, acceleration, suspension, detonations, engine vibrations, and movement of articulated parts.

Engaging

Optimal simulation training is engaging enough to remove psychological barriers to learning, creating psychomotor reflexes that respond to real-life situations. D-BOX immerses trainees by replicating the platform's movement while using rich motion cueing to replicate vibrations, such as detonations, in the surrounding environment.

Affordable

Traditional training simulators are not necessarily optimal from a cost-benefit perspective. D-BOX motion systems deliver state-of-the-art simulation at a fraction of the price. What's more, our interoperability and ease of deployment further reduce the overall cost of deploying and managing a simulation training program.

Easy to Deploy

Operational requirements and situations can quickly develop and change, requiring simulation systems that can be rapidly deployed anywhere, anytime. An interoperable COTS solution, D-BOX technology is a game changer, thanks to its ease of installation, low electrical power requirements, low shipment weight and reduced deployment time.

Interoperable

Easily integrate D-BOX technology into your existing simulator's architecture. We rely on open APIs and communication standards to ensure that our motion systems easily interoperate with partner and client software.

Commercial Off-the-Shelf

As a COTS system, D-BOX offers a remarkably affordable and reliable solution. Our technology is supported and documented, and therefore easy to integrate and manage. Users can access all our expertise, including motion code, behavioural subtlety and vibrations.

ROBUST TECHNOLOGY THAT SIMULATES REAL-LIFE MOVEMENT

D-BOX motion systems enable you to develop highly reliable training applications that respond and adapt to real-life situations, such as textures, velocity, engine vibrations and vehicle dynamics motion. By integrating our motion systems into your simulation engine, you gain a highly reliable simulator that responds to on-screen situations and user responses, using kinesthetic cues to build operators' psychomotor reflexes.



Photo courtesy of the U.S. Department of Defense

D-BOX: A PROVEN SIMULATION TECHNOLOGY PARTNER

“The combination of CarSim/TruckSim math model engineering quality and the D-BOX motion system’s response accuracy and intensity provides a level of immersion and sense of driving speed only found in much more complex and expensive simulators.”

- Robert McGinnis, Mechanical Simulation Corporation

“D-BOX offers a versatile plug-and-play solution to incorporate motion simulation into Virtual Battlespace scenarios. If you’re looking to increase immersion for drivers, equipment operators and pilots, D-BOX delivers the kinesthetic cues to provide trainees with accurate feedback.”

- Pete Morrison, Co-CEO, Bohemia Interactive simulations

“D-BOX is a strong partner when we develop simulators. Their solution is a flexible, turnkey motion system that allows us to deliver the best simulators to our customers on time and on budget.”

- Arnold Free, COO, CM Labs

ENSURE OPERATORS ARE OPTIMALLY PREPARED FOR REAL-LIFE SCENARIOS IN THE FIELD

Over the years, we have developed a thorough understanding of the industry, enabling us to support integration projects as well as end users. Our technology partners include training facilities, research organizations, technology integrators and simulation software providers.

The following simulation software solutions currently integrate with D-BOX technology:

- ▶ CarSIM & TruckSIM by Mechanical Simulation Corporation
- ▶ Flight Simulator by Microsoft
- ▶ Helism by Presagis
- ▶ Prepar3D by Lockheed Martin
- ▶ VBS2 and VBS3 by Bohemia Interactive Simulations
- ▶ Vortex by CM Labs Simulations
- ▶ Xplane by Laminar Research

Still looking for a way to affordably integrate motion into your simulation application? Ask your software provider about existing integrations with D-BOX.

D-BOX is a member of these respected simulation and defense industry organizations:



In 2016, D-BOX was, once again, recognized as being one of the most innovative companies in Training and Simulation. This third consecutive award was presented as part of Military Training International’s 2016 Top 100 Simulation and Training Companies.



D-BOX: MOTION SYSTEMS FOR CRITICAL OPERATIONS TRAINING

D-BOX Technologies Inc. designs, manufactures and commercializes cutting-edge motion systems intended for the entertainment and industrial markets.

D-BOX offers the most optimized, interoperable, engaging and easy-to-deploy motion system on the market today.

We can help you deliver maximum readiness to those who serve in the field.

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