

# 3WAVES



## XR Adoption Risk Reduction

3WAVES is a vestibular stimulation system based on Mayo Clinic technology<sup>1</sup> with proven ability to safely mitigate effects of cybersickness in XR.

## Immersion

Translates virtual motion into physical sensation by aligning vestibular input with visual movement, creating an unparalleled sense of presence in any simulator.

## Hardware and Software Agnostic

3WAVES is quick and easy to integrate with any new or existing simulation infrastructure.

## Initial Deployment

20+ 3WAVES units and >2,000 electrodes deployed across DOW and commercial sites.

## Future Capabilities Enhancement

Next-generation 3WAVES development expands applicability to domes and spatial disorientation training.

[www.3waves.tech](http://www.3waves.tech)



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3WAVES is a spinout of Luna Labs USA LLC

(1) Cevette et al. Electrogastrographic and autonomic responses during oculovestibular recoupling in flight simulation. Aviat Space Environ Med. 2014 Jan;85(1):15-24. doi: 10.3357/ASEM.3673.2014. PMID: 24479254.



## Compatible by Design

Connect to your existing simulation stack in minutes, not weeks. 3WAVES is built on open standards for quick simulation and headset integrations across any environment.

## Tech Specs

Stimulation Channels	3 independent electrodes
Update Rate	Up to 100 Hz, configurable
Motion Axes	3DOF (yaw, pitch, roll) derived from full sim data
Flight Simulators	Prepar3D, MSFS, X-Plane, any CIGI IG
Input Protocols	CIGI, SimConnect, OpenXR, SteamVR, UDP, serial
End-to-end latency	9 ms typical at 60 Hz input
Host	Windows 10/11 (64-bit), single USB connection
Stateless operation	No session, user, or training data retained on device
Cybersecurity	Letter of Volatility and TAA compliance available

## Ready to Explore?

Whether you're looking to integrate vestibular feedback or want to see a demo, we'd love to hear from you.

## Contract Vehicles

AFWERX CSO: FA4890-24-P-0024  
Air Force IDIQ: FA8003-24-D-0016

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