

Blaise Photonics Solves the World's First Safe, Mid Air, Volumetric, Touchable Content Display

The First True Free-Space Volumetric Display: Touchable, Real-Time 3D Content that Exists in Mid-Air



MANHATTAN, NY, UNITED STATES, June

30, 2026 /EINPresswire.com/ -- A category-defining advancement in display technology: the first safe, scalable system for real-time, mid-air, interactive volumetric visuals; no screens, headsets, glasses, user tracking, or enclosures required.



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Damien Geller Blaise

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New York, New York, June 30th 2026 – A breakthrough in data visualization and real-world interactivity, [Blaise Photonics](#) has created fully realized 3D content that occupies physical space and can be seen and touched from any angle.

Still in early development, the platform signals a

fundamental shift in how people engage with digital information, physical environments, and remote communication, bridging the gap between virtual and physical worlds.

Invented by Damien Blaise Geller, a Creative Technologist who has prior completed contracts for The United Nations, Cisco Systems, Amazon Prime, and others, this breakthrough allows users to do a number of applications, including:

Manifest a Computer Aided Design, or CAD model, on a physical surface instantly

Interior design showrooms with true-to-scale virtual objects

Enhance firearms training with light speed targets

Feel the presence of a remote business partner or loved one

Walk inside architecture that exists only in design

Physical Artificial Intelligence AI interface

Data Visualization touch control for education, training, & more.

Geller began by building a laser and particulate-based prototype at home, eventually creating a stable, floating volumetric model capable of basic human expression as a first proof of concept. A talking floating pair of low-resolution volumetric human lips as a first proof of concept.

Building on this early success, Blaise Photonics was formed, backed by seed-stage private investment to expand capabilities and secure intellectual property. After intensive exploratory R&D, a second prototype was developed, demonstrating real-time volumetric telepresence via a floating HD human face transmitted across the country with near-zero perceptible delay.

The custom software stack extrapolates 2D video into volumetric outputs in real-time, mapping pixels into precise 3D laser coordinates in physical space. This system also introduced direct touch interaction through responsive, mid-air volumetric touch controls.

A smaller handheld prototype is currently in development, as a step toward consumer-ready deployment, with applications across home, office, education, and training environments. Blaise Photonics has been granted a U.S. Utility Patent and is seeking protection in more than 30 countries globally, including, but not limited to; Canada, China, Europe, Japan and Mexico.

The Blaise Photonics VAST (Voxel Atmosphere Stabilization Terminal) scales from handheld devices to warehouse-sized environments, enabling both personal and large-scale immersive applications.

Larger formats enable room-scale simulations and interactivity, making the system suitable for public installations across travel, hospitality, retail, cultural institutions, and large-scale events. It operates in lit environments, including rooms with ambient light or partial sunlight, removing the need for overly controlled lighting conditions. Its visible volumetric content is paired with spatialized audio and has real-time touch responsiveness, enabling direct physical interaction with floating 3D content.

The system creates 3D objects with light using a process similar to additive manufacturing, where laser beams build dimensional layers in mid-air. These beams are refreshed hundreds to thousands of times per second, producing fluid motion and lifelike presence. Laminar flow particle columns form an invisible medium for laser diffraction, allowing stable rendering across multiple spatial layers in stabilized open air. There is no screen, reflection plane, or enclosure. No head tracking, wearables, or constrained viewing angles are required; the content exists physically in space and is visible from all directions to multiple viewers simultaneously.

Unlike current conventional “[hologram](#)” display technologies, this system generates true volumetric content that occupies real air space. Common “3D hologram” fans are flat blades with no projection, visible only from limited angles. Pepper’s Ghost illusions (e.g., Tupac at Coachella) are also flat and rely on transparent screens. Some marketed “holograms” are just transparent

TV's in a box. Even advanced light field displays require extremely limited viewing positions. Traditional volumetric displays are enclosed and often rely on fast-moving internal components that cannot be touched without injury. Many widely circulated "holograms" are simply augmented reality effects or composited visuals.

Since the system uses laser diffraction to encode and refresh real volumetric depth, it is one of the only display technologies in history whose content can be technically called a real true hologram. The distinction being the real-time refreshed medium as opposed to the static films traditionally used by holographers.

The Blaise Photonics VAST System represents a milestone long envisioned in science fiction, from Star Wars to Blade Runner to Iron Man, now realized in a functional, scalable platform. Despite widespread misuse of the term "hologram," the VAST System is the first to combine real-time rendering, free-space projection, volumetrics, and physical touch interactivity in a single platform.

Blaise Photonics has achieved a major leap forward in interactive display technology, real-time holography, and immersive communication. The technology is now positioned to transition from experimental development to real-world deployment across industries.

For more information, please contact info@blaisephotonics.com for opportunities in strategic partnership, investment, and acquisition:

ABOUT BLAISE PHOTONICS

Blaise Photonics was founded in 2023 and is based in New York, NY. The only display company globally to offer safe, scalable, real-time, interactive, volumetric, mid-air, true hologram content. The Blaise Photonics mission is to expand the possibilities of human communications and to support unprecedented multifaceted interactivity to be brought to the world.

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