A Spanish team led by Elodi Buzbib from the University of Navarra has introduced FlexiVol, a revolutionary display that allows interaction with three-dimensional holograms without the need for glasses or gloves. This device, reminiscent of science fiction technologies, opens new horizons for gaming, medicine, and design.

FlexiVol uses volumetric display technology: images are projected onto a fast-moving surface, creating the effect of a 3D object. Unlike traditional systems with rigid screens, FlexiVol features elastic bands that allow users to touch and manipulate virtual objects with their fingers. This makes the interaction safe and intuitive. For instance, one can “grab” a virtual ball or rotate a model in space.

Tests conducted with 18 participants showed that FlexiVol is faster and more accurate than a 3D mouse in tasks like selecting or tracing objects. Users noted the natural feel of working with holograms, as if they were real. The device is already being envisioned for surgical planning, where doctors can manipulate 3D organ models, or in education for studying complex structures.

Currently, FlexiVol is a prototype, but its creators are confident that the technology will find use in everyday life.