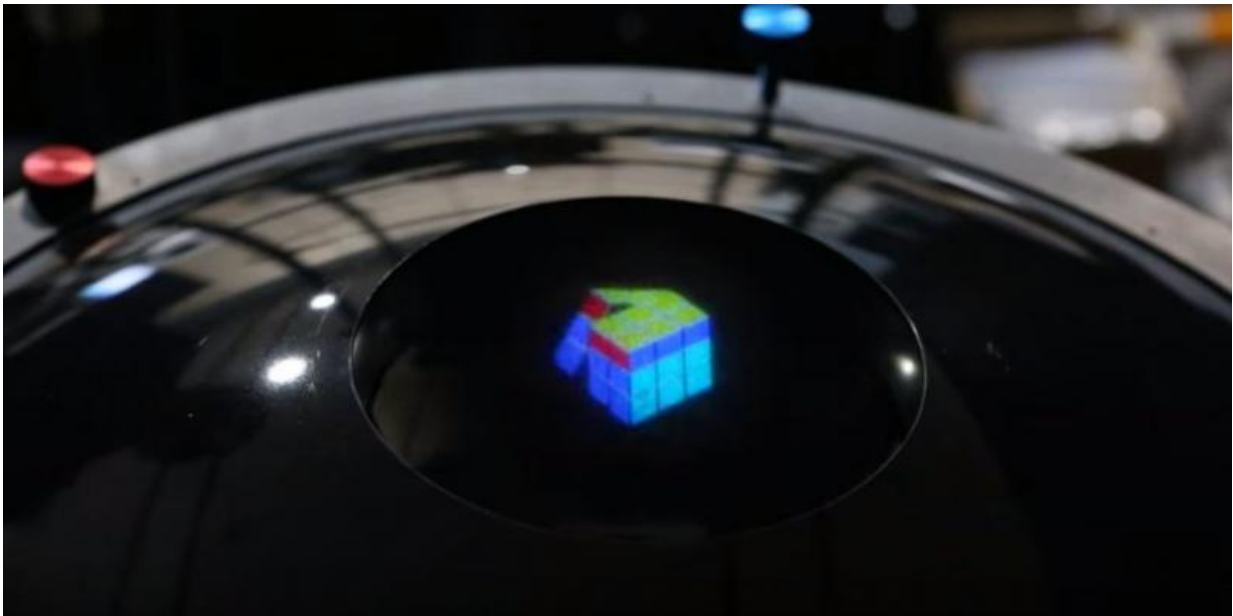


Team in South Korea focusing on tech to display color 3D hologram

December 4 2015, by Nancy Owano



IT watchers in South Korea report that a team from the Electronics and Telecommunications Research Institute (ETRI) developed 360° 3D hologram imaging technology. Their color 3D holograms are special in that you don't need headsets to see them.

This is a 3-inch Rubik's Cube which appears as if it is floating, said *Pocket-lint*, and the concept is now in development.

Specifically, IT watchers at the *ETnews*, a department of *The Electronic Times*, reported that ETRI announced the [technology](#); it implements 3D hologram images in red, green, and yellow on top of a tabletop-type digital display system.

The technology reproduces a 360° 3D hologram at a size of 3 inches, said *BusinessKorea*.

Actually, it has been a collaboration involving a number of businesses and organizations. They included LG Display, Silicon Works, Yunam Optics, A Optics, Korea University, Kyungpook National University and others.

"Sited in a table, the technology beams a three-dimensional, 3-inch, animated representation of a Rubik's Cube. It can be viewed from 360-degrees—appearing as if floating in the air," said Rik Henderson in *Pocket-lint*. The initiative makes use of light diffraction, said Henderson, to create the image, while interference between the light beams create the [colors](#).

The floating cube image is in a regular hexahedron form, said *ETnews*, with a size of 3-inch (7.62 cm) on top of tabletop-type display system. The image can be seen anywhere from 360°.

What's next: The research team continues its work. They now are aiming for improvements in the quality of the holographic image and in increasing its visible size.

Kim Jin-woong, head of the Broadcasting Media Research Department at the ETRI, said, "This is our first time to develop a new hologram which is three-inches big, and which can be viewed from every direction. We will conduct a follow-up study in order to use the technology to enable hologram broadcasting and vivid [virtual reality](#) by

expanding the size to 10 inches and improving its image quality in the [future](#)."

Engadget said ETRI plans to commercialize a 10-inch Holo TV by [2021](#).

According to *ETnews*, "We are currently working on R&D with a goal of implementing 10-inch Holo TV by 2021 when Giga KOREA Project ends," said Choo Hyun Gon. He heads the ETRI Digital [Holography](#) Institute.

What might the development news eventually bring the consumer? Cho Jin-young wrote in *BusinessKorea* about use "as a core technology that allows users to watch hologram images in smartphones or ushers an age of [hologram](#) TV."

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