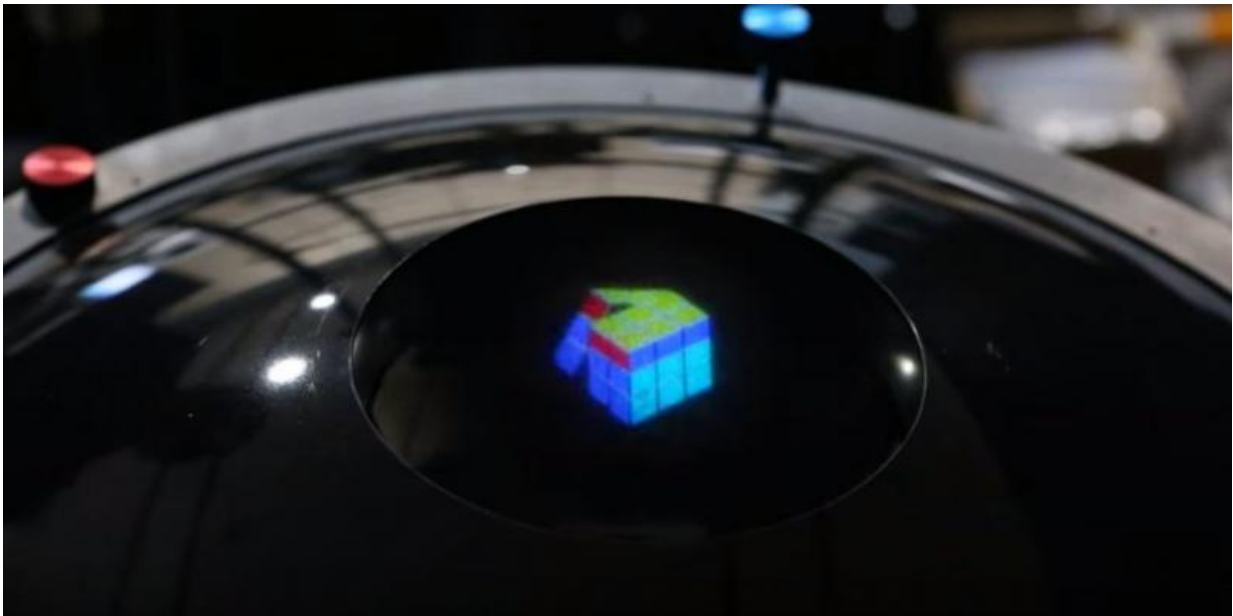


Team in South Korea focusing on tech to display color 3D hologram

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."

© 2015 Tech Xplore

Citation: Team in South Korea focusing on tech to display color 3D hologram (2015, December 4) retrieved 3 May 2024 from

<https://techxplore.com/news/2015-12-team-south-korea-focusing-tech.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--