

Russian scientists from Smart Engines and RAS institutes have developed a new way to process images, which makes the TV watching a comfortable both for color piles and people with normal vision.

More than 300 million people with color blindness live in the world. Previously developed technologies helped only partially and often distorted the colors - both for color blind and sighted people.

The new method works differently: it does not change the colors, but enhances the contrast of important details that are poorly visible to color blind. At the same time, the colors on the screen remain natural for all spectators.



Dmitry Sidorchuk et al. / Image Journal (2025)

The technology was tested with the participation of people with impaired color perception and without. Most of the participants - 90% of color piles and 95% of people with normal vision - said that the image has become more understandable and pleasant.