

# Pico projector used in eye based video gaming system

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(PhysOrg.com) -- Students at the University of Texas in Austen are playing video games. Honestly, that is really not news. Students all over the country are playing video games, usually when they should be studying. In this case however, they are not goofing off, they are creating some serious science, and perhaps the next generation of video game controllers. Ones that do not require users to have a controller in their hand.

With the use of a Pico [projector](#) the students have created an eye-tracking camera which, when paired with a [virtual reality](#) gaming setup, allows the system to track the eye movement of the user, and translate that to actions in the game world. Basically, this creates an effect that is very similar to looking around in the real world. As the player moves their view from location to location, the view of the world changes. The system relies on no traditional controllers and connects to no [sensors](#) on the player at all.

A similar system, called Kinect, is currently in use with the [Xbox 360](#) video game system. The major difference is that the Kinect system uses a set of cameras to use the players whole body as a controller. This system, if implemented, would bring these types of systems to a new level.

The students have been testing the system with both a flight simulation, and a first person shooter. In the flight simulation testing players were able to control both the pitch and the roll of the virtual aircraft by

moving only their heads.

The system currently features a small screen, but if future versions go commercial, the screen would be up sized.

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