



ATOMIC OBJECT

# TECHNOLOGY SHOWCASE

## 7 Things about Valve Index

### 1 - What is it?

The Valve Index is a wired VR headset with advanced handheld technology. The remotes used on the Valve can sense each finger, and therefore significantly increase how realistic the VR world is inside of the Valve in comparison to other headsets.

### 2 - How does it work?

The Valve Index is a wired system, meaning that one needs a computer with Steam VR installed in order to use it. It uses two sensors that one needs to install in the room that they wish to use the Valve in, and the handheld remotes are wireless.

### 3 - Who's doing it?

The Valve is a more expensive device, and therefore isn't as widely used as other VR devices currently available. The main demographic using the Valve is currently VR aficionados, and those that desire the "latest and greatest" VR technology available to the public.

## 4 - Why is it significant?

The Valve changed the game with VR, literally. The finger-sensor control on the hand-held remotes significantly changes the experience. On other devices there are buttons or knobs that one uses to control a or several fingers, while the Valve simply senses one lifting or lowering their finger(s). This makes the experience incredibly more immersive, and gives users more control over their personal VR experiences.

## 5 - What are the downsides?

There are currently three large downsides. The first is the price. Coming in at approximately \$600 USD, it is significantly more expensive than its competitors. For example, the Oculus Quest 2 can be found for \$300 USD, half the price. Secondly, the software is completely bug-free yet, so sometimes the finger sensors aren't incredibly accurate. Thirdly is that it is a wired system, however those that are fans of Steam VR may not find this to be a problem.

## 6 - Where is it going?

There are rumors of a Valve Index 2 coming out, however the changes that Valve would make are currently unknown to the public, as the original device came out in 2019, only two years ago from when this article was being written.

## 7 - What are the implications for higher education?

Similar to other VR devices, the academic uses are the same. Being able to fully immerse one in a 3D experience that would otherwise be found on a computer screen is a huge advantage academically. Moreover, the individual finger sensitivity is a game-changer academically, as it now allows full hand-function. For example, if one is learning about surgery, it could allow them to have control over all of their fingers in a natural way, rather than focusing on which buttons to push in order to control certain fingers.

