



Tech Talk

Oculus Rift

by Max Farrington

On the 11th June 2015, the American company Oculus presented its Oculus Rift, a virtual reality helmet. The company was bought by Facebook for 2 billion dollars back in March 2014. Since then, the company has had much more money available and many more researchers to work on this revolutionary product for the video game industry.

The Oculus Rift was first conceived in 2012 by Palmer Luckey. The nineteen year old was bored of the current video games and consoles as they were not immersive enough. He decided to create his own device using various parts. Once the prototype was good enough he presented it online. John Carmack, was interested in this project and made direct contact with Palmer to try the prototype. John Carmack is a famous programmer in the video game industry; he is one of the pioneers in first personal shooter games, also known as FPS. Following a couple of messages, Palmer sent him the prototype and Carmack was very enthusiastic about it.

Palmer Luckey founded Oculus VR in 2012 with investors and video game entrepreneurs. His main path to fame started after a campaign on the crowdfunding website, Kickstarter. This is a company which uses the process of crowd-funding to fund ideas and projects. Using cash from his crowdfunding campaign Luckey managed to build around 3000 models. Later on in 2013, Carmack left his own company, ID Software, to become Chief Technology Officer of Oculus VR. Finally, at the end of that year, David De Martini, ex-president of EA Games, also joined Oculus VR; De Martini is responsible for some very well known video game studios.

So, what exactly is this Oculus Rift? It is a small helmet that covers the eyes and ears as well as two small hand-held controllers. These devices are linked to a gaming console that sends the data from video games to the helmet and controllers. The idea is to play as if you were actually 'in' the game. For example in a hockey game, you would make movements as one of the players; these movements are transferred in real time to the game console which in turn, also in real time, transforms you into one of the hockey players.

However exciting this new product is, it's not quite ready yet. It has some small side effects, mainly motion sickness, also called kinetosis or simulator sickness; this involves dizziness, fatigue and nausea. This does not affect everyone and the degree of impact is varied. Some

games have more effect than others. Oculus VR hopes to reduce or even get rid of all kinetosis by suggesting a little exercise after using the Oculus Rift. They also recommend starting your gaming session with games that cause no or very little kinetosis, before moving onto other games. Another solution Oculus are researching is the creation of a virtual nose which would give the player a fixed point, therefore reducing simulator sickness.

The Oculus Rift is not out yet and although much noise was made around this ground-breaking product at this year's video game convention E3 in Los Angeles, the unit price has not been announced. Some estimate it could be around \$1400. The Rift will be released in early 2016.