VR Corrector

From developer

Please guys, I need your review, I need to know:
- is it helpful or not
- what headset you are using
- what factor is best for your headset.

Why do you need to use this asset in your VR game?

Everyone knows one BIG disadvantage about VR headsets, it's nausea. So, if you do not want people to nausea from your game, you need to use it.

Advantages/Disadvantages

Advantages:

- It's about to no delay when you rotate your head.

Disadvantages:

- The view is quite jittering.

How does it work?

The problem:
For example, if you have headset with 90 FPS, between frames you have 11 milliseconds. To show you the frame, unity3d needs to read your head rotation parameters, then when all your scripts work will be done, the frames will be rendered, and you see this frame 11 milliseconds! It is bad, and no matter how good your headset is, there are always will be delay.
The Solution:
Predicate new frame rotation. This includes your rotation speed and acceleration.

How to see the difference?

Open testScene from VRCorrectorSamples folder. Put on your headset. And rotate your head.
To see the difference, enable/disable VRCorrector component on controllers object in the scene.

How to set the factor?

Factor, it is how much to predicate ahead. Factor is measured in frames.
In Ideal world, you need to set this parameter to 0.5 to shift it by half a frame. But scripts can spend some time to execute and some time needed for frame to be rendered on your headset.
For my headset that I tested on, it was 0.8.

In your game you need to add settings do set this factor or disable it. For example, let's imagine that new headset manufactures will do it on hardware level and in that case, this feature will not be needed.