

Visual Effect - Psychonauts

In the game *Psychonauts*, there is a weapon called a confusion grenade. This weapon causes disorientation (control inputs are inverted) and blurred vision to whomever is hit with it.

The blurred vision comes in the form of hazy, psychedelic lines that ripple outward - like the concentric circles formed by a rock is thrown in a pond.



(screenshot taken from youtube)

I believe this effect can be replicated by using some kind of shader that takes the the current state of the screen, divides it up into circles radiating outward from the main character's head, and, over a set time interval, slowly pushes each circle outward.



If I were to try and create this effect, I would take each set of circles and collect pixel data from from circle to circle.

Then take those circles and push them outward from center and and loop this effect over a set time interval quickly to create a pulsing effect.

The effect is slightly affected when the character runs in a direction. The circles will bunch up - like sound waves.

To create this effect I might try to use a velocity variable and a direction to push or pull the circles one way or another.



On top of everything else the screen is slightly blurred. We know this is an easy manipulation with some kind of blur box Image kernel effect. I don't believe the effect is changed when the camera moves, however, when hit with the confusion grenade, the screen image inverts - like looking through a mirror. This, also, should be a very easy effect to reproduce.