ABKASPO ULTRA REALISTIC WATER DOCUMENTATION

Index

Introduction	1
What's new?	1
How to set up?	
How to add displacement?	
•	
Technical details	2

Introduction

This time we did this documentation clearer, so if you have some problems don't forget request information <u>here</u>.

ABKaspo's Ultra Realistic water (A.U.R.W) is our water package, this one help to developers adding water to their projects. The package documentation version is 4.0 so if you have a newer or older version don't follow these instructions.

What's new?

This update has changed somethings, we started adding more GUI.

Change list:

- 1. Changed folder organization (things are coming)
- 2. We started experimenting with planar reflections, if you look for it in scripts folder you will saw "our" script. We, actually, stole it from here.
- 3. Added a shader editor.
- 4. Changed all shader (again).
- 5. Changed demo scene.
- 6. Demo executes for windows, download here.

We, actually, are working on new AURW URP Pro, so this will be our last update, for now (October 2023)

ABKASPO ULTRA REALISTIC WATER DOCUMENTATION

How to set up?

This time it's an easier tutorial, you just need to create a material, and select "Shader Graphs / Easy Water"

Pd: if you change the shader, you must change the ShaderGUI at "scripts -> Editor -> GUI -> Shader -> AURW_Free_Shader_GUI.cs"

How to add displacement?

We decided to give to the user more settings, we already left two types of displacement, one with noise the other one based on heigh texture. First you must enable it, in the material inspector, in the latest variables you will see a toggle, enable it, then select displacement type.

Technical details

There are to refraction types, Advanced and Normal. The first one it's complex, it's like refraction in real life, we used CodinBlack's refraction, it's based on normal map so if you have selected advanced type you must know the variable "Refraction" (float) isn't refraction strength but is refraction index of refraction, you can put the real water's index of refraction (1.33) but we put 0.003. For change refraction strength you must change the normal strength. The advanced is based on normal mapping and player's point of view, the other one it's based only in normal mapping and the refraction variable is the strength. All types of refraction are based on alpha, so if you want to this option, for a better rendering, unable alpha channel.

Reflection isn't ready, it's a beta so we must change somethings, but we are near. It's based on camera position, but we must fix the scale and position rendering.

Water quality is the type of depth, high or low, it's just a minimal detail. It changes foam rendering and coloring, so normal mapping too.

If you want more details you can see the Shader Graph and its subgraphs.