

AQUAS LITE

DOCUMENTATION

BASED ON AQUAS LITE VERSION 1.0.2

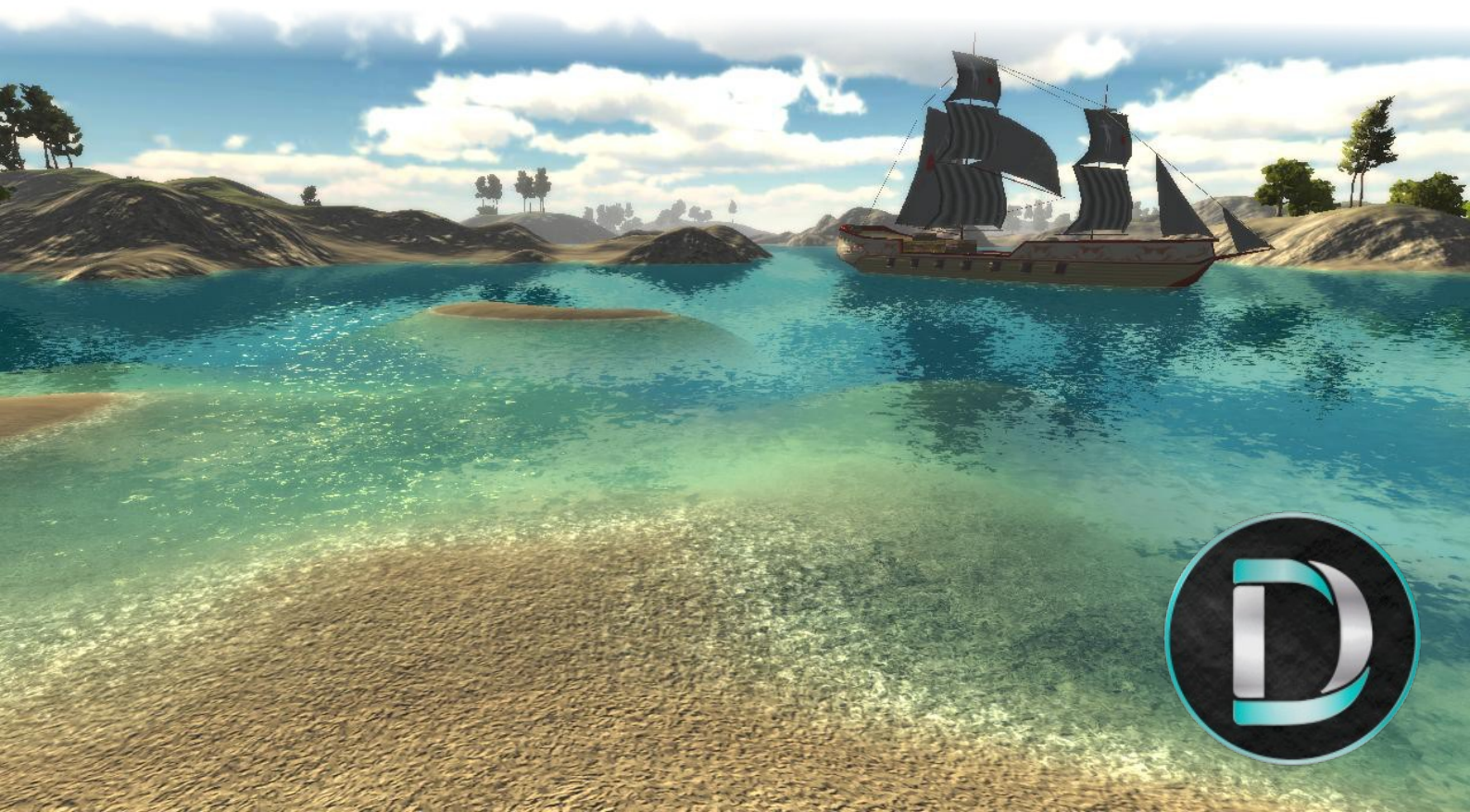


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1. Introduction

Thank you for purchasing AQUAS Lite! This documentation has been written to give you a quick overview of the asset. It contains one of the nine different flat water shaders from AQUAS with all its features. Nice looking for all types of 3D games, AQUAS Lite - even though it's only a stripped down version of AQUAS - is highly customizable and adjustable to fit all environments, atmospheres and dimensions.

In this manual you will learn how AQUAS Lite works and how to do a basic setup. It covers the most common setups to keep setup as quick and simple as possible. Of course no manual can cover every eventuality, so if you need a setup that isn't described in this documentation, please head over to the [Forum Thread](#) and leave a post.

2. Setup

1. Import AQUAS

2. Open the "Prefabs" folder

- Assets/AQUAS-Lite/Prefabs

3. Drag the "WaterPlane" prefab to the scene

- Position the plane at the desired sea level
- Scale the plane at will, but keep scale in y- and x-direction equal

4. Adjust the material properties

Now that you have AQUAS Lite in the scene, you can tweak the material properties at will until it looks exactly the way you want it to. Please have a look at the properties table in this manual for information on what each individual parameter does.

IMPORTANT: Attach the *AQUAS_Camera* script to your camera, to make sure, depth rendering is enabled on all platforms and quality levels.

3. Shader Parameters

This chapter gives you an overview of all shader properties of AQUAS Lite. The following overview should help you customize your water.

Parameter	Function
Normal Texture	Sets the normal map for the shader
Normal Tiling	Sets the tiling of normal maps
Main Color	Color that is being absorbed.
Deep Water Color	Darkest water color
Fade	Defines how quickly color is absorbed (Web & Desktop only)
Density	Defines the intensity of the color absorption (Web & Desktop only)
Depth Transparency	Sets the depth based transparency
Shore Fade	Sets the transparency fade between zero level and the deepest point at which the water is still transparent
Shore Transparency	Softens sharp edges at shore
Enable Reflections	Enables/Disables reflections
Reflection Intensity	Sets the reflection intensity
Distortion	Sets the reflection distortion
Specular	Sets the specularity
Specular Color	Sets the specular color (except for the triple textures shader – this one uses the light color as specular color)
Gloss	Sets the gloss
Light Wrapping	Sets the light wrapping
Refraction	Sets the refraction (mobile shaders only have a "pseudo-refraction")
Wave Speed	Sets the wave speed
Foam Texture	Sets the foam texture
Foam Tiling	Sets the foam tiling
Foam Blend	Sets the foam blend from shore
Foam Visibility	Sets the foam visibility (0 = only water is visible, 1 = only foam is visible)
Foam Color	Sets the foam color
Foam Intensity	Sets the foam intensity

Foam Contrast	Sets the foam contrast
Foam Speed	Sets the foam Speed
Enable Custom Fog	Enables independent fog on the water. This option is useful, when working with fog systems, that rely on the z-buffer, like Tenkoku or TOD. (Desktop & Web only)
Fog Color	Sets the color of the fog
Fog Distance	Sets the fog distance from the current position
Fog Fade	Sets the fog fade – higher numbers = sharp transition

IMPORTANT: Use the pre-made material as an orientation, if you're not sure about certain values.

4. Trouble Shooting

Problem:

I've added AQUAS Lite to the scene, but the water is invisible.

Two possible solutions:

1. If you're working on DirectX9, please switch to DirectX11 or OpenGL. AQUAS uses surface effects, that are not supported on DirectX9.
2. Attach the AQUAS_Camera.cs script to your main camera. On some platforms (Android, Webplayer, WebGL) the water won't show in forward rendering mode, because it requires depth rendering to be enabled, which by default is only enabled in deferred rendering mode. The script enables depth rendering in forward rendering mode.

Problem:

I've made a build for mobile, but the water has a jagged shoreline where it intersects with the terrain.

Solution:

This behaviour occurs on certain mobile devices (e.g.: Nexus 5 & 6), while most devices show the water correctly. Unfortunately there's no actual solution to this yet, because it's uncertain, what's causing the problem. However there's a workaround that will minimize the problem:

Reduce the Depth transparency in the inspector of the waterplane's material to 0. The water won't be transparent anymore, but the Shore Transparency parameter will still keep shore edges smooth – not an ideal solution but the only one for the time being.

Problem:

I'm using AQUAS Lite on mobile, but it's very slow.

Solution:

AQUAS Lite has not been designed to work on mobile devices. It's rather heavy even on current generation devices, so use at your own risk. For water shaders that have been designed specifically for mobile devices, please have a look at the AQUAS Water Set.

You can evaluate the performance of AQUAS's mobile water shaders on different devices by downloading this [DEMO APK >>](#)

5. Additional Information

- The current version of AQUAS Lite is v1.0.2
- The scripts used in this package are as complete as they can be without limiting you in the way you design your game, they are not enclosed though. You're free to edit all included scripts to make it fit your exact needs
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Note: *AQUAS Lite doesn't work with DirectX9. As far as tests went, AQUAS Lite supports all platforms, except for Windows phone.*

For video tutorials on the use of AQUAS Lite, please visit the following link:

<https://dogmaticgames.wordpress.com/products/aquas-water-shader-set/tutorials/>