

WATER RIPPLE **FOR SCREENS**

USER DOCUMENTATION v1.0

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Summary

Water Ripple for Screens is a highly customizable full-screen image effect that creates water ripple effects on top of your final scene rendering on runtime.

Quick Setup

Drag & Drop on to the Main Camera the Ripple Effect Script, press play and click on the screen to see the water ripple.

Ripple Effect

Main Script that controls the generation of ripple effects on screen.

Parameters

- Detect Click: true -> Detects player input (mouse left click or touch), false -> Doesn't detect player input.
- Wave Count: Maximum number of waves on screen.
- Time Infinity: true -> Effect will be played without considering time and with value of 1 on the Anim Curve.
- Wave Time: Time length/duration in seconds for each wave.
- Wave Anim Curve: Curve that determines how the wave is going to behave through time. (Recommended to make it go from 0 to 1 on the X and Y axis, it might work differently if outside of bounds).
- Wave Internal Radio: Size increase of the initial radio size through time, goes from 0 to 'WaveInternalRadio' in 'WaveTime' seconds (Fig. 1).
- Wave External Radio: Initial size of the wave. (Fig. 1).
- Wave Scale: How much the wave affects the image, in other words the strength of the generated waves.
- Wave Speed: Velocity of the internal waves of the ripple effects, also viewed as wave amplitude.
- Wave Frequency: Higher values shows more waves, lower values less waves.
- Circle X Scale: Scale of the circle on the X Axis.
- Circle Y Scale: Scale of the circle on the Y Axis.

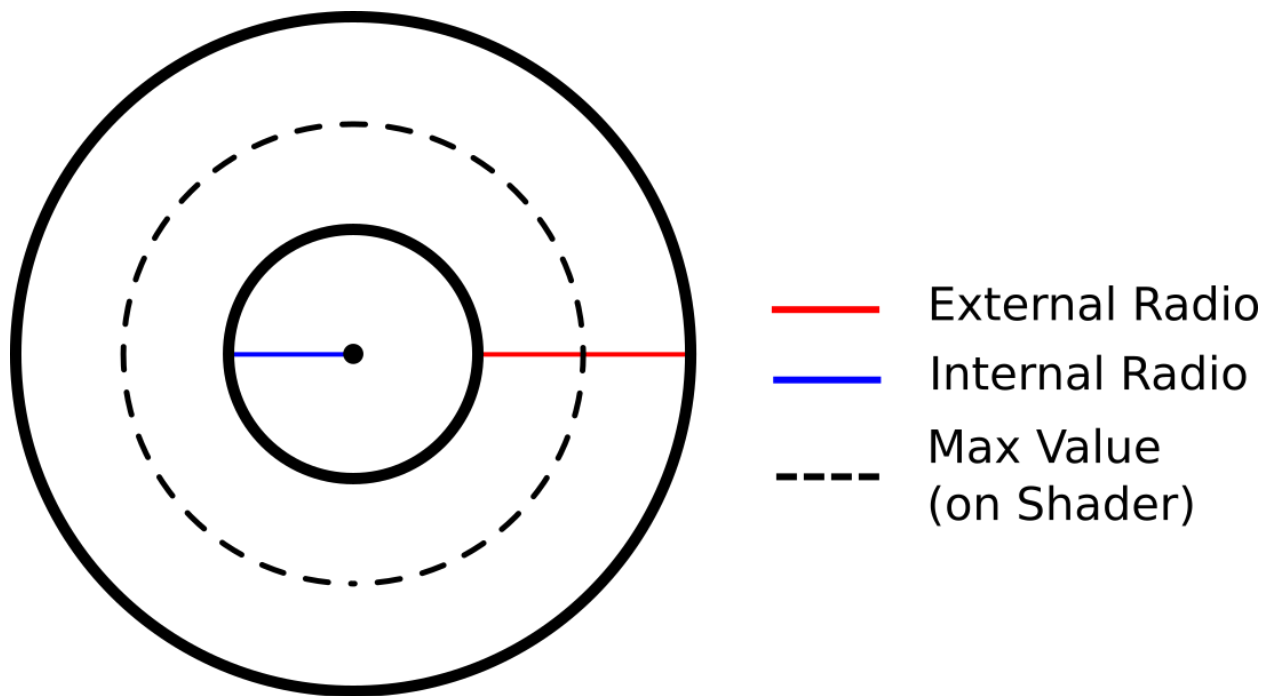


Figure 1. Graphical explanation of the ripple effect. The waves are in between the black circles. Inside the internal radius no waves are drawn.

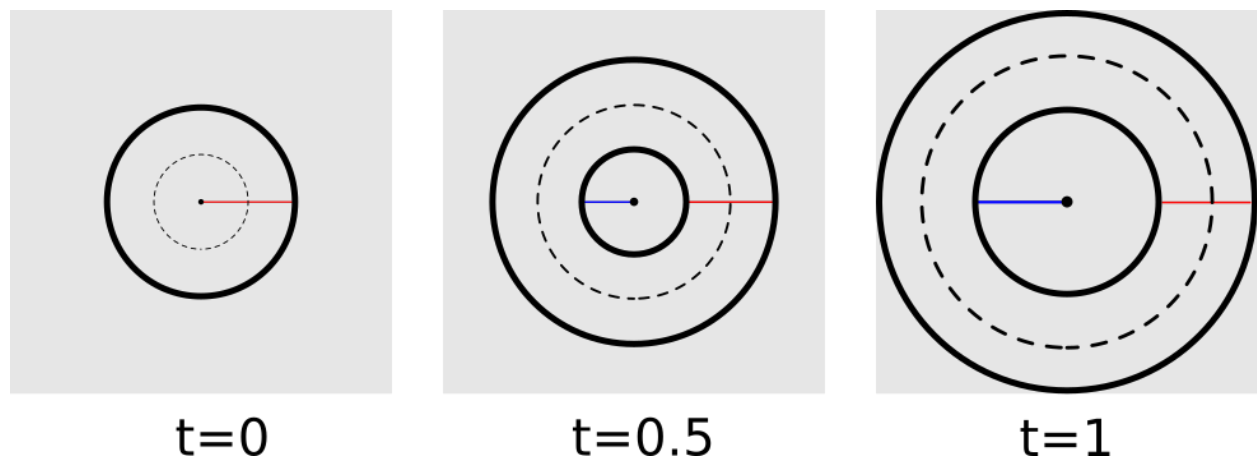


Figure 2. Wave growth. The External radius maintains its size while the Internal radius increases through time (*Wave Time* = 1).

Functions

You can call some functions of the Ripple Effect Script to spawn water ripple effects at will. (Make sure to put *'using WaterRippleForScreens'* on top of your script so it can call the Ripple Effect Script functions).

public void SetNewRipplePosition(Vector2 _targetPos)

Gets a position in screens coordinates to spawn a new ripple effect.

- *Vector2 _targetPos* is the target position on the screen where the new ripple effect is going to spawn, it uses screen coordinates (ex: If screen is 800x600 to spawn a ripple on the center of the screen *_targetPos* would be *Vector2(400, 300)*).

public void StopAllEffects()

Stops all ripple effects animations on screen.

Ripple Generator

Use this to automatically generate ripple effects on screen. Drag & Drop onto the Main Camera.

Parameters

- Random Generation: true -> Ripple effects are going to be generated randomly on any position of the screen, false -> Ripple effects are going to be generated in the positions on the *targetPosition* list.
- Time Between Ripple Median: Fixed time in seconds to spawn the next ripple effect.
- Time Between Ripple Desv: Offset time in seconds to alter the fixed time value. (Next Spawn Time is calculated as: $Median + Random.Range(-Desv, Desv) = Spawn Time$.
- Target position: Array of positions to spawn new ripple effects. (Position is in Screen Coordinates Range: (0, 0) -> (Screen Width, Screen Height))

Functions

You can call some functions of the Ripple Generator Script to add or remove positions to spawn water ripple effects. (Make sure to put '*using WaterRippleForScreens*' on top of your script so it can call the Ripple Generator Script functions).

This functions modify the values of the *targetPosition* List (used when *Random Generation* is false), although you can also modify it from the inspector is recommend to use the functions if you are going to modify its values on runtime.

public void AddTargetPosition(Vector2 _targetPos)

Adds a new position (*_targetPos*) to the list of positions (*targetPosition*). This list is used when *Random Generation* value is false.

- *Vector2 _targetPos* is the target position on the screen where the new ripple effect is going to appear, it uses screen coordinates.

public void ReplaceTargetPosition(int _index, Vector2 _targetPos)

Replaces a position from *targetPosition* located on *_index* to *_targetPos*

- *int _index* tells what's the position on *targetPosition* list to replace. If it is out of bounds the function won't do anything.
- *Vector2 _targetPos* is the new target position that will replace the one at *_index* on *targetPosition* list, it uses screen coordinates.

public void RemoveTargetPosition(int _index)

Removes an element from *targetPosition* list at *_index* position.

- *int _index* tells what's the position on *targetPosition* list to remove. If it is out of bounds the function won't do anything.

public void RemoveTargetPosition(Vector2 _targetPos)

Removes the first occurrence of *_targetPos* from *targetPosition* list.

- *Vector2 _targetPos* is the target position to delete.

Notes

- Before building to any platform make sure to include 'Hidden/RippleDiffuse' to Always Included Shaders Array located on Edit -> Project Settings -> Graphics.

Contact

Any request, suggestion, bug report contact me: josehzz358@gmail.com

Licensing

Licensing for Water Ripple for Screens is governed by the Unity Asset Store End User License Agreement (EULA). For more information about the EULA, please [click here](#).

Thank you

Big thank you for buying Water Ripple for Screens you are not only supporting me but also the further development of this asset package, so expect future updates and more quality packages to come.