

# ShockWave Effect

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PLEASE LEAVE A REVIEW OR RATE THE PACKAGE IF YOU FIND IT USEFUL! Enjoy! :)

## Contact

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Questions, suggestions, help needed?

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## Description/Features

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Awesome ShockWave Effect!

- Add it to any script with just one line of code!
- Create ShockWaves (and Reverse ShockWaves)
- Customize your ShockWave style with AnimationCurves
- Easily Pause/UnPause Shockwaves
- Unity Free friendly.
- Fully commented C# code.
- Awesome demos!

## Terms of Use

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You are free to add this asset to any game you'd like However:

please put my name in the credits, or in the special thanks section. :)

please do not re-distribute.

## Table of Contents

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## ShockWave.cs

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ShockWave.cs is the main script that creates and manages the shockwaves.

### **Speed,Radius,Amplitude,WaveSize**

these are the 4 values that we can adjust to change the look, and style of the shockwave.

#### **Speed:**

this is just the speed at which the animation will play.

#### **Radius:**

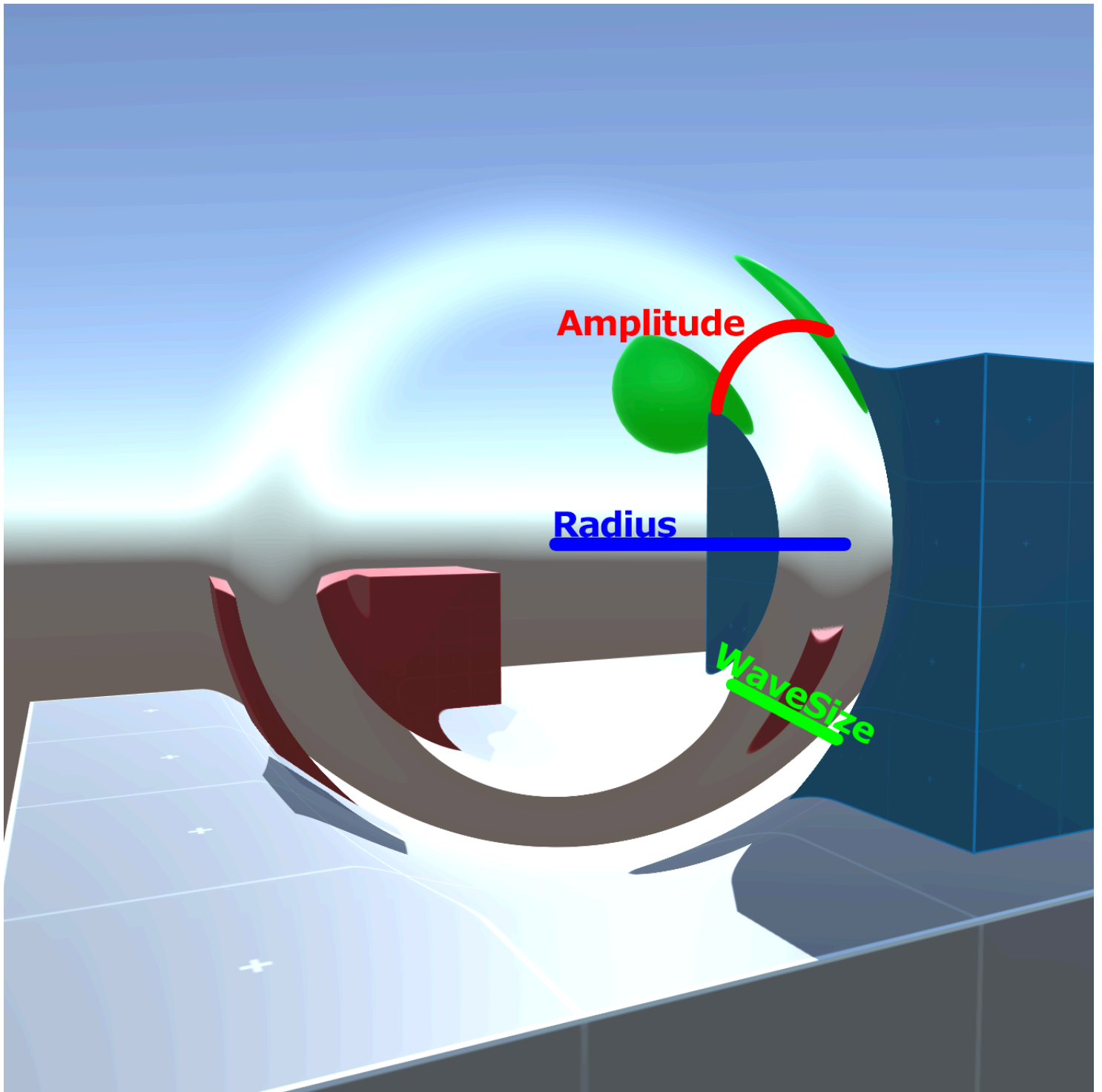
the distance between the center of the circle to it's edge.

#### **Amplitude:**

the distortion amount along the edge of the shockwave.

#### **WaveSize:**

this is the thickness of the shockwave.



## Methods

There are 12 methods that can be used to display a shockwave.

**This first set will allow you to pass in a Position (or a GameObject), and floats for Speed, MaxRadius, Amplitude, and WaveSize**

```
C#  
public void StartIt(Vector2 Position, float Speed = 1f, float MaxRadius = 1f, float Amplitude =
```

```
C#  
public void StartIt(Vector3 Position, float Speed = 1f, float MaxRadius = 1f, float Amplitude =
```

```
C#  
public void StartIt(Vector3 Position, bool IsScreenPosition, float Speed = 1f, float MaxRadius =
```

```
C#  
public void StartIt(GameObject Target, float Speed = 1f, float MaxRadius = 1f, float Amplitude =
```

Similar to the first set, this Second set will allow you to pass in a Position (or a GameObject), and floats for Speed, MaxRadius, Amplitude, and WaveSize. However the animation will play in reverse

```
C#  
public void ReverseIt(Vector2 Position, float Speed = 1f, float MaxRadius = 1f, float Amplitude =
```

```
C#  
public void ReverseIt(Vector3 Position, float Speed = 1f, float MaxRadius = 1f, float Amplitude =
```

```
C#  
public void ReverseIt(Vector3 Position, bool IsScreenPosition, float Speed = 1f, float MaxRadius =
```

```
C#  
public void ReverseIt(GameObject Target, float Speed = 1f, float MaxRadius = 1f, float Amplitude =
```

If you want more control over how the shockwave looks, the last set will allow you to pass in animationCurves

```
C#  
public void StartIt(Vector2 Position, float Speed = 1f, AnimationCurve radiusOverTime = null,
```

```
C#  
public void StartIt(Vector3 Position, float Speed = 1f, AnimationCurve radiusOverTime = null,
```

```
public void StartIt(Vector3 Position, bool IsScreenPosition, float Speed = 1f, AnimationCurve
```

C#

```
public void StartIt(GameObject Target, float Speed = 1f, AnimationCurve radiusOverTime = null,
```

C#

## Demo1

In demo1 we are creating shockwaves based on the value of the sliders, and the value of the reverse toggle.

```
...  
void Update ()  
{  
    if (Input.GetMouseButtonDown(0))  
    {  
        if (RevSW)  
        {  
            ShockWave.Get().ReverseIt(Input.mousePosition,true,Speed,MaxRadius, Amp ,WS);  
        }  
        else  
        {  
            ShockWave.Get().StartIt(Input.mousePosition,true,Speed,MaxRadius, Amp, WS);  
        }  
    }  
}  
...
```

C#

## Demo2

In demo2 we are creating shockwaves not calling StartIt (or Reverselt), and then setting the radius, amplitude, and waveSize to a random float.

This technique can be done if you want a lot of control over the shockwave, for example a game that uses 3D Touch.

C#

```

...
void Update()
{
    if (Input.GetMouseButtonDown(0))
    {
        SW = ShockWave.Get();
        SW.SetPosition(Input.mousePosition, true);
        SW.radius = Random.Range(0.05f, 0.2f);
        SW.amplitude = Random.Range(0.05f, 0.2f);
        SW.waveSize = Random.Range(0.05f, 0.2f);
    }
}
...

```

## Demo3

Demo3 is a testing scene for the ShockWaves using AnimationCurves. Edit the values in "ShockWaveMaker" GameObject, Play the scene, then click around.

C#

```

...
public float speed = 1f;
public AnimationCurve radiusOverTime;
public AnimationCurve amplitudeOverTime;
public AnimationCurve waveSizeOverTime;

void Update()
{
    if (Input.GetMouseButtonDown(0))
    {
        ShockWave.Get().StartIt(Input.mousePosition, true, speed, radiusOverTime, amplitudeOverTime, waveSizeOverTime);
    }
}
...

```