

Grapple Hook Documentation

Setup

Add the **Grapple Hook** script to your player object and along with it a Spring Joint and Rigidbody will be added if they aren't present already.

Here you may adjust the:

Grapple Range: This affects the range that the grapple will reach. Default is 15

Spring Max: This affects the maximum strength that the grapple will pull back on the player to prevent stretching the grapple too much. Default is 70

Dampening Max: This affects how bouncy the grapple will be. It's not recommended to put it higher than 2 as this starts to affect motion while swinging. Lower values mean less dampening and more bounciness. Default is 2

Detection Sphere Radius: This affects the margin of error between the hit point and where the grapple is actually supposed to be. Higher means more likely to detach/untangle grapple when wrapping around things but also means less likely to detect small corners when wrapping. Default is 0.1;

Offset Grapple: This determines where the grapple will be shot from. Negative values are towards the left and positive values are towards the right. This is more for aesthetics in first person games. Default is -0.2

Layermask: This affects which objects can be grappled. Default is "Everything"

Material: This affects the aesthetics of the grapple. Any material can be used. Default is "None"

Implementation

In the player controller script, or a separate script with a reference to the player grapple, use the following:

GrappleTo(hit): Use this to set a grapple and pass in a RaycastHit of where the grapple will hit (Find this in the example scene for implementation)

UnGrapple(): Use this to detach all grapples (In the example scene this is when the user stops holding down the mouse button)

Find **void GrappleHook()** in the Player Controller script in the example scene for intended use