Pixul Physics 2D - Script Reference

Version 1.0

This document contains a detailed breakdown of the PixulPhysics2D variables and code for reference when tweaking settings or diving into the code. We recommend you check out the demo scene included in the package.

PixulPhysics2D Script Variables

Dotted Line Properties

No. of Points

Defines how many points are used to draw your trajectory. *Eg: A value of 10 will display 10 dots along the trajectory.*

Trajectory Prefab

This is the prefab that is instantiated along the trajectory line.

Destroy After Firing NEW

Enable if you would like to remove the trajectory after firing. Use the delay to decide how long (seconds) to wait before removing the trajectory.

Solid Line Properties

No. of Points

Defines how smooth your trajectory is. A higher value gives a smoother trajectory but may affect performance.

Corner Roundness NEW

Defines how many vertices are used to round the corners of your trajectory.

End Roundness NEW

Similar to corner roundness, but defines how many vertices are used to round the ends of your trajectory.

Width Curve NEW
Using the graph to plot the width of your trajectory from start to end.

Colour NEW
Use the gradient editor to define the colour of your trajectory from start to end. Note: If you use a material on your trajectory, this colour will be multiplied on top of your material.

Material NEW
Drag and drop a material to use to texture your trajectory.

Tiled & Tile Amount NEW
Enable tiling of your material along your trajectory. Control the amount of tiling with the Tile Amount slider that will appear when you enable tiling.

Destroy After Firing NEW
Enable if you would like to remove the trajectory after firing. Use the delay to decide how long (seconds) to wait before removing the trajectory.

Physics Properties

Gravity
Multi-directional gravity settings. These values control the gravitational forces along the X and Y axis. *(Default is X:0, Y:-12)*.

Power
The power that is applied to your throwable object. *(Default: 3)*.

Collision Properties

Damping
The throwable object's movement will be factored by this on collision with an object in the obstacle layer. *Eg: Damping value of 0.5 will reduce the throwable object's movement by 50% on collision. A value of 2 will double the speed on collision.*

If you would like custom damping settings per object, you can apply the "CollisionProperties" script to those objects and set the damping individually. *Eg: Sand would have a much lower damping value than a brick wall.*

Obstacles Layer Mask
This is the layer that will contain all of the objects you want your throwable object to collide with. For details on how to set this up a custom layer, please see the quick setup document included in the package.

Thanks for reading.

The Pixul Team.

Need support? Want to give feedback or request features? Please don’t hesitate to email us at contact@pixul.io and we’ll get back to you as soon as possible.