

# Particle System

2022.08.11



Open Editor(Editor)



Scene(Particle Effect)

Simulate Layers	Simulate Layers Nothing Layer Mask
Resimulate	
Show Bounds	Unity
Show Only Selected	Unity

## Particle System()









Mode	<div> <div></div> <div>Unity</div> <div></div> </div>
Random( )	<div> <div></div> <div></div> </div>
Loop( )	<div> <div></div> <div></div> </div>
Ping-Pong( )	<div> <div>Loop</div> <div></div> </div>
Burst Spread( )	<div> <div></div> <div></div> </div>
Spread	<div> <div></div> <div>0</div> <div></div> <div>0.1</div> <div></div> <div>10%</div> </div>
Speed	<div> <div>Mode</div> <div>Loop</div> <div>Ping-Pong</div> <div>Constant( )</div> <div>Curve( )</div> <div></div> </div>
Length( )	<div> <div>Emit from:</div> <div>Volume</div> <div></div> </div>
Emit from:( )	<div> <div>Base( )</div> <div>Volume( )</div> </div>
Texture( )	<div> <div></div> </div>
Position( )	<div> <div></div> </div>
Rotation( )	<div> <div></div> </div>
Scale( )	<div> <div></div> </div>
Align to Direction( )	<div> <div></div> </div>
Randomize Direction( )	<div> <div></div> <div>0</div> <div></div> <div>1</div> <div></div> </div>
Spherize Direction( )	<div> <div></div> <div>0</div> <div></div> <div>1</div> <div></div> <div>5</div> </div>
Randomize Position( )	<div> <div></div> <div>0</div> <div></div> </div>

# Donut

## Donut( )

<div> <div></div> </div>	<div> <div></div> </div>
Shape( )	<div> <div></div> </div>
Donut( )	<div> <div></div> </div>
Radius( )	<div> <div></div> </div>
Donus Radius( )	<div> <div></div> </div>
Radius Thickness( )	<div> <div></div> <div>0</div> <div></div> <div>1</div> <div></div> </div>
Arc( )	<div> <div></div> </div>
Mode	<div> <div></div> <div>Unity</div> <div></div> </div>
Random( )	<div> <div></div> <div></div> </div>
Loop( )	<div> <div></div> <div></div> </div>
Ping-Pong( )	<div> <div>Loop</div> <div></div> </div>
Burst Spread( )	<div> <div></div> <div></div> </div>







Rotation(°)	<input type="text"/>
Scale(%)	<input type="text"/>
Align to Direction(°)	<input type="text"/>
Randomize Direction(°)	<input type="text"/> 0 <input type="text"/> 1 <input type="text"/>
Spherize Direction(°)	<input type="text"/> 0 <input type="text"/> 1 <input type="text"/> 5
Randomize Position(°)	<input type="text"/> 0 <input type="text"/>

## Edge

Edge(°)

<input type="text"/>	<input type="text"/>
Shape(°)	<input type="text"/>
Edge(°)	<input type="text"/> (Y) <input type="text"/>
Radius	<input type="text"/>
Mode	<input type="text"/> Unity <input type="text"/>
Random(°)	<input type="text"/>
Loop(°)	<input type="text"/>
Ping-Pong(°)	<input type="text"/> Loop <input type="text"/>
Burst Spread(°)	<input type="text"/>
Spread	<input type="text"/> 0 <input type="text"/> 0.1 <input type="text"/> 10% <input type="text"/>
Speed	<input type="text"/> Mode <input type="text"/> Loop <input type="text"/> Ping-Pong <input type="text"/> Constant(°) <input type="text"/> Curve(°) <input type="text"/>
Texture(°)	<input type="text"/>
Position(°)	<input type="text"/>
Rotation(°)	<input type="text"/>
Scale(°)	<input type="text"/>
Align to Direction(°)	<input type="text"/>
Randomize Direction(°)	<input type="text"/> 0 <input type="text"/> 1 <input type="text"/>
Spherize Direction(°)	<input type="text"/> 0 <input type="text"/> 1 <input type="text"/> 5
Randomize Position(°)	<input type="text"/> 0 <input type="text"/>

## Rectangle

Rectangle(°)





Linear  $X \rightarrow Y \rightarrow Z$

Orbital Radial Offset 

Speed Modifier

# Limit Velocity Over Lifetime(□□□□□)

<div> <div></div> </div>	<div> <div></div> </div>
Separate Axes( )	<div> <div></div> <div>X Y Z</div> </div>
Speed( )	<div> <div></div> </div>
Space( )	<div> <div> <div>Separate Axes</div> <div></div> </div> </div>
Dampen( )	<div> <div></div> </div>
Drag( )	<div> <div></div> </div>
Multiply by Size( )	<div> <div></div> </div>
Multiply by Velocity( )	<div> <div></div> </div>

[illegible]

Drag

# Inherit Velocity(□□□□)

<code>Mode()</code>	<code>uint8_t</code>
<code>Initial()</code>	<code>uint8_t*</code>
<code>Current()</code>	<code>uint8_t*</code>



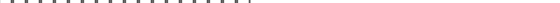







Size By Speed 

Speed Range [X] Speed Range [|||||] 10 [ ] 100 [ ] Speed Range

- $\square \square 10$  
- $\square \square 100$  
- $10 \square 100$   55 

# Rotation Over Lifetime( $\square\square\square\square\square$ )

□□	□□
Separate Axes(□□□)	□□□□□□□□□□□□□□□□ X□Y □ Z □□□□□□□□
Angular Velocity(□□□)	□□□□□□/□□□□□

Constant( Constant()	
Curve( Curve()	
Random Between Two Constants( Random Between Two Constants()	
Random Between Two Curves( Random Between Two Curves()	

[illegible]

# Rotation By Speed(□□□□)





Bounce(□□)	<div><div></div></div>
Lifetime Loss(□□□□)	<div><div></div></div>
Min Kill Speed(□□□□□)	<div><div></div></div>
Max Kill Speed(□□□□□)	<div><div></div></div>
Radius Scale(□□□□)	<div><div></div></div>
Send Collision Messages(□□□□□)	<div>OnParticleCollision <div></div></div>
Visualize Bounds(□□□□)	<div><div></div></div>

# World(□□)

□□□□□□□□

□□	□□
□□	<div>World □□</div>
Collision Mode(□□)	3D □ 2D
Dampen(□□)	<div><div></div></div>
Bounce(□□)	<div><div></div></div>
Lifetime Loss(□□□□)	<div><div></div></div>
Min Kill Speed(□□□□□)	<div><div></div></div>
Max Kill Speed(□□□□□)	<div><div></div></div>
Radius Scale(□□□□)	<div><div></div></div>
Collision Quality(□□□□)	<div><div></div></div>
High(□)	<div><div></div></div>
Medium (Static Colliders)(□□(□□□□□))	<div><div></div></div>
Low (Static Colliders)(□(□□□□□))	<div><div>Medium</div><div>Low</div><div>Medium</div><div>Low</div><div></div></div>
Collides With(□□□□)	<div><div></div></div>
Max Collision Shapes(□□□□□)	<div><div></div></div>
Enable Dynamic Colliders(□□□□□□□)	<div><div></div><div>Kinematic</div><div></div><div></div></div>
Voxel Size(□□□□)	<div><div>□□ (voxel</div><div>Medium</div><div>Low</div><div></div><div>Unity □</div><div>Collision Quality</div><div>Medium</div><div></div><div>Low</div><div></div></div>
Collider Force(□□□□□)	<div><div></div></div>
Multiply by Collision Angle(□□□□□)	<div><div></div></div>
Multiply by Particle Speed(□□□□□)	<div><div></div></div>

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World Collision Quality(□□□)

Unity Unity

 Voxel Size 

[illegible]

# Triggers(□□□)

Triggers OnParticleTrigger()

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Colliders Colliders Add (+) Remove (-)

[illegible]



Inside()	
Outside()	
Enter()	
Exit()	
Ignore	
Kill	
Callback	
Radius Scale()	
Visualize Bounds()	

## Sub Emitters(□□□)

[illegible]

Collision Trigger Death [ Manual Emission





# Texture Sheet Animation(贴图动画)



## Grid(网格)贴图

贴图	贴图
Mode(模式)	Grid(网格)
Tiles(贴图)	贴图 X贴图 Y贴图
Animation(动画)	Animation Whole Sheet(整图) Single Row (单行) Sprite(精灵)
Row Mode(行模式)	Animation Single Row 贴图
Custom(自定义)	贴图
Random(随机)	贴图
Mesh Index(网格索引)	贴图(Mesh Index) 贴图
Row(行)	Single Row Custom 贴图
Time Mode(时间模式)	贴图
Lifetime(生命周期)	贴图
Speed(速度)	贴图
FPS	贴图
Frame over Time(帧数/时间)	贴图
Start Frame(起始帧)	贴图
Cycles(循环)	贴图
Affected UV Channels(受影响的UV通道)	贴图 UV 贴图

## Sprite(精灵)贴图

贴图	贴图
Mode(模式)	Sprites 贴图
Time Mode(时间模式)	贴图





Lights

Maxin

# Trails( )

(Trail Renderer)

<div></div>	<div></div>
Mode( )	<div></div>
Particle( )	<div></div>
Ribbon( )	<div></div>
Ratio( )	<div>0</div> <div>1</div> <div>Unity</div> <div></div>
Lifetime( )	<div></div>
Minimum Vertex Distance( )	<div></div>
World Space( )	<div>Local Simulation Space</div> <div></div>
Die With Particles( )	<div></div>
Ribbon Count( )	<div>1</div> <div>1</div> <div>N</div> <div></div>
Split Sub Emitter Ribbons( )	<div></div>
Attach Ribbons to Transform( )	<div></div>
Texture Mode( )	<div></div>
Stretch( )	<div></div>
Tile( )	<div>N Material</div> <div>Tiling</div> <div></div>
DistributePerSegment( )	<div></div>
RepeatPerSegment( )	<div>Material</div> <div>Tiling</div> <div></div>
Size affects Width( )	<div></div>
Size affects Lifetime( )	<div></div>
Inherit Particle Color( )	<div></div>
Color over Lifetime( )	<div></div>
Width over Trail( )	<div></div>
Color over Trail( )	<div></div>

Generate Lighting Data( )	
Shadow Bias( )	

Renderer (Trail Material)



Unity (Color Gradient) (Line Renderer)

# Custom Data( )

Custom Data Editor

(Vector) [MinMaxCurve](#) (Color) HDR [MinMaxGradient](#)

Alpha UI

# Renderer( )

Renderer

Render Mode( )	
Billboard( )	
Stretched Billboard( )	
Camera Scale( )	0
Velocity Scale( )	0
Length Scale( )	0  0
Horizontal Billboard( )	XZ“ ”
Vertical Billboard( )	Y
Mesh( )	3D
None( )	Trails
Normal Direction( )	1.0  0.0
Material( )	

[illegible]

