Particle System

???????????-?????2022.08.11

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`Open Editor(□□□□)`?????? Editor ?????????????????

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?`□□`?????`□□-□□□□`

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`Scene(□□)`????`Particle Effect(□□□□)`????????????????????

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Simulate Layers(???)	????????????????????????????`□□`?????????`Simulate Layers`???`Nothing`????????????`Layer Mask`?????????????????????????????????????
Resimulate(????)	??
Show Bounds(????)	???????Unity ?????????????????????????????????????
Show Only Selected(??????)	???????Unity ??????????????????????????

Particle System(????)???

`Particle System`??`Inspector(□□□)`????`Particle System`?

??	??
Duration(????)	???????????????????????????????
Looping(????)	????????????????????????????????????
Prewarm(??)	??????????????????????????????????`Looping`?????
Start Delay(????)	??????????????????????????????????`Prewarm`??????
Start Lifetime(??????)	??????????????????
Start Speed(????)	??????????
3D Start Size(3D????)	??????`Start Size`??X(??)Y(??)Z(??)????Z(??)????3D????
Start Size(????)	??????????????????
3D Start Rotation(3D????)	??????`Start Rotation`??XYZ???
Start Rotation(????)	??????????????????????
Flip Rotation(????)	????????????????`0`?`1`???????
Start Color(????)	?????????
Gravity Modifier(?????)	???????????`Physics`??`(Edit-Project Settings-Physics)` ????????????????
Simulation Space(????)	??????????????????
Local(??)	??????????????????????
World(??)	??????????????????????????
Custom(???)	??????????????????????????
Simulation Speed(????)	??????????????????
Delta Time(???)	?`Scaled`?`Unscaled`?????????????????????????????
Scaled	??`Time(Edit-Project Settings-Time)□□`??`Time Scale(□□□□)`?
Unscaled	????
Scaling Mode(????)	??????????????????????????
Hierarch(??)	???`Local`???????????????
Local(??)	?????????????????????????????????????
Shape(??)	??????????????????????
Play on Awake(?????)	??????????????????
Emitter Velocity(?????)	??????????`Inherit Velocity`?`Emission`???????
Transform	??????????????????
Rigidbody	??????????????????????
Max Particles(????)	??????????????????????????????
Auto Random Seed(??????)	????????????????????????????????`false`?????????????
Random Seed(????)	??????????????????????????
Stop Action(????)	??? `Duration`???
none(?)	?

Disable(??)	??????
Destroy(??)	??????
Callback(??)	? `OnParticleSystemStopped` ?????????????????
Culling Mode(????)	??? (off-one) ?????
Automatic(??)	?????? `Pause` ?????????? `Always Simulate`
Pause And Catch-up(?????)	??? ???????????
Pause(??)	??????????
Always Simulate(????)	???
Ring Buffer Mode(??????)	??????????? `Max Particles` ?????????????????????????????????????
Disabled(???)	?? `Ring Buffer Mode` ??????????????????
Pause Until Replaced(??????)	?????????????????????? `Max Particle` ??????????????????????????????????
Loop Until Replaced(??????)	?????????????????????????????????????? `Max Particle` ??????????????????????????????????

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Constant(??)	?????????????????
Curve(??)	?????????????????????? □□□ ?? □□□ ?????????????? X?Y ? Z ????????
Random Between Two Constants(??????)	??????????????????????????
Random Between Two Curves(??????)	???

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Emission(??)

??????????????????????

??	??
Rate over Time(???????????)	?????????????
Rate over Distance(???????????)	???????????????
Bursts(??)	???????????????????????????????
Time(??)	??????????????????????????
Count(??)	?????????????
Cycles(??)	?????????? ???????????????
Interval(??)	?????????????????????????
Probability(??)	???????????????????????????????????? `1` ?????????

Shape(??)

????????????????????????????

<!-- tabs:start -->

Sphere?

Sphere???Hemisphere??

??	??
Shape(??)	???????
Sphere(??)	???????????
Hemisphere(??)	??????????????????
Radius(??)	???????
Radius Thickness(????)	????????????? 0 ???????????????? 1 ???????????????????????????????

Arc(??)	?????????????
Mode	?? Unity ??????????????
Random(??)	???????????
Loop(??)	??????????????????????????????
Ping-Pong(??)	? `Loop` ??????????????????????????????
Burst Spread(????)	??? ?????????????????????
Spread	???????????????????? 0 ????????????????????? 0.1 ????????? 10% ???????
Speed	???????????????? `Mode` ? `Loop` ? `Ping-Pong` ?????????????????????????? `Constant(□□)` ?????????????? `Curve(□□)` ????????
Texture(??)	???????????????
Position(??)	??????????????????
Rotation(??)	????????????
Scale(??)	???????????????
Align to Direction(????)	??? ?????????????????? `Start Rotation` ???????
Randomize Direction(?????)	???????????????? 0 ????????????? 1 ??????????
Spherize Direction(?????)	????????????????????????????? 0 ????????????? 1 ????????????? Shape ??? Sphere ???????
Randomize Position(?????)	??????????????????????? 0 ????????????????????????????????

Cone

Cone(??)

??	??
Shape(??)	???????
Cone(??)	??????????????????????????????????
Angle(??)	?????????????? 0 ?????????? 90 ??????
Radius(??)	???????
Radius Thickness(????)	???????????? 0 ???????????????? 1 ??????????????????????????????
Arc(??)	?????????????
Mode	?? Unity ??????????????
Random(??)	???????????
Loop(??)	??????????????????????????????
Ping-Pong(??)	? `Loop` ??????????????????????????????
Burst Spread(????)	??? ?????????????????????

Spread	???????????????????? 0 ???????????????????? 0.1 ????????? 10% ???????
Speed	???????????????? `Mode` ? `Loop` ? `Ping-Pong` ????????????????????????? `Constant(□□)` ?????????????? `Curve(□□)` ????????
Length(??)	???????? `Emit from:` ????? `Volume` ????????
Emit from:(????)	?????????? `Base(□□)` ? `Volume(□□)`
Texture(??)	???????????????
Position(??)	??????????????????
Rotation(??)	????????????
Scale(??)	???????????????
Align to Direction(????)	??? ?????????????????? Start Rotation ???????
Randomize Direction(?????)	???????????????? 0 ????????????? 1 ??????????
Spherize Direction(?????)	????????????????????????????? 0 ????????????? 1 ????????????? Shape ??? Sphere ???????
Randomize Position(?????)	??????????????????????? 0 ????????????????????????????????

Donut

Donut(???)

??	??
Shape(??)	???????
Donut(???)	???????????????????
Radius(??)	??????
Donus Radius(?????)	??????
Radius Thickness(????)	???????????? 0 ???????????????? 1 ??????????????????????????????
Arc(??)	?????????????
Mode	?? Unity ??????????????
Random(??)	???????????
Loop(??)	??????????????????????????????
Ping-Pong(??)	? `Loop` ??????????????????????????????
Burst Spread(????)	??? ?????????????????????
Spread	???????????????????? 0 ???????????????????? 0.1 ????????? 10% ???????
Speed	???????????????? `Mode` ? `Loop` ? `Ping-Pong` ????????????????????????? `Constant(□□)` ?????????????? `Curve(□□)` ????????
Texture(??)	???????????????

Position(??)	??????????????????
Rotation(??)	???????????
Scale(??)	???????????????
Align to Direction(????)	??? ?????????????????? Start Rotation ???????
Randomize Direction(?????)	??????????????? 0 ???????????? 1 ??????????
Spherize Direction(?????)	?????????????????????????????? 0 ???????????? 1 ???????????? Shape ??? Sphere ???????
Randomize Position(?????)	?????????????????????????? 0 ??????????????????????????????????????

Box

Box(?)

??	??
Shape(??)	???????
Box(?)	?????????????????????????????? (Z) ?????
Emit from:(????)	???????????`Volume(□□)`?`Shell(□)`?`Edge(□□)`
Texture(??)	???????????????
Position(??)	??????????????????
Rotation(??)	???????????
Scale(??)	???????????????
Align to Direction(????)	??? ?????????????????? Start Rotation ???????
Randomize Direction(?????)	??????????????? 0 ???????????? 1 ??????????
Spherize Direction(?????)	?????????????????????????????? 0 ???????????? 1 ???????????? Shape ??? Sphere ???????
Randomize Position(?????)	?????????????????????????? 0 ??????????????????????????????????????

Mesh?

Mesh(??)?MeshRenderer(?????)?SkinnedMeshRenderer(???????)

??	??
Shape(??)	???????
Mesh(??)	?`□□□`?????????????
MeshRenderer(?????)	???????????? (Mesh Renderer) ????
SkinnedMeshRenderer(???????)	????????????????? (Skinned Mesh Renderer) ????
Type(??)	?????????
Vertex(??)	???????
Edge(??)	??????

Triangle(???)	????????
Mode	????????????????
Random(??)	???????????
Loop(??)	??????????????????
Ping-Pong(??)	??? Loop ??????????????????
Mesh(??)	?????????
Single Material(????)	???
Use Mesh Colors(??????)	?? `Color` ? `TintColor`
Normal Offset(????)	??????????????????????????
Texture(??)	???????????????
Position(??)	??????????????????
Rotation(??)	???????????
Scale(??)	???????????????
Align to Direction(????)	?? Start Rotation ???????
Randomize Direction(?????)	???????????????? 0 ???????????? 1 ?????????
Spherize Direction(?????)	?????????????????????????????????? 0 ???????????? 1 ???????????? Shape ??? Sphere ???????
Randomize Position(?????)	?????????????????????????? 0 ???

????????? `read/write enabled` ?????????????? `Editor` ??????Unity ??????????????????????????????????? `Import Settings` ?? `Read/Write Enabled` ??

`Mode` ?????????????????????????????? □□ ?? □□ ?????????????????????/ ????????????

Sprite?

Sprite?Sprite Renderer

??	??
Shape(??)	???????
Sprite	? □□□ ???? `Sprite` ??????
Sprite Renderer	???????? `Sprite Renderer` ????
Type(??)	?????????
Vertex(??)	???????
Edge(??)	??????
Triangle(???)	????????
Sprite	???????????? `Sprite`

Normal Offset(????)	???`Sprite`????????????????????
Texture(??)	???????????????
Position(??)	??????????????????
Rotation(??)	????????????
Scale(??)	???????????????
Align to Direction(????)	??? ?????????????????? Start Rotation ???????
Randomize Direction(?????)	???????????????? 0 ????????????? 1 ??????????
Spherize Direction(?????)	????????????????????????????? 0 ????????????? 1 ????????????? Shape ??? Sphere ???????
Randomize Position(?????)	??????????????????????? 0 ????????????????????????????????

Circle

Circle(??)

??	??
Shape(??)	???????
Circle(??)	????????????????????????????
Radius(??)	???????
Radius Thickness(????)	???????????? 0 ???????????????? 1 ??????????????????????????????
Arc(??)	?????????????
Mode	?? Unity ??????????????
Random(??)	???????????
Loop(??)	??????????????????????????????
Ping-Pong(??)	?`Loop`??????????????????????????????
Burst Spread(????)	??? ?????????????????????
Spread	???????????????????? 0 ????????????????????? 0.1 ????????? 10% ???????
Speed	????????????????`Mode`?`Loop`?`Ping-Pong` ??????????????????????????`Constant(□□)`??????????????? `Curve(□□)`????????
Texture(??)	???????????????
Position(??)	??????????????????
Rotation(??)	????????????
Scale(??)	???????????????
Align to Direction(????)	??? ?????????????????? Start Rotation ???????
Randomize Direction(?????)	???????????????? 0 ????????????? 1 ??????????

Spherize Direction(?????)	????????????????????????????? 0 ????????????? 1 ????????????? Shape ??? Sphere ???????
Randomize Position(?????)	??????????????????????? 0 ????????????????????????????????

Edge

Edge(??)

??	??
Shape(??)	???????
Edge(??)	??????????????????? (Y) ?????
Radius	??????
Mode	?? Unity ?????????????
Random(??)	??????????
Loop(??)	?????????????????????????????
Ping-Pong(??)	? `Loop` ??????????????????????????????
Burst Spread(????)	??? ????????????????????
Spread	???????????????????? 0 ???????????????????? 0.1 ???????? 10% ???????
Speed	???????????????? `Mode` ? `Loop` ? `Ping-Pong` ??????????????????????????? `Constant(□□)` ?????????????? `Curve(□□)` ????????
Texture(??)	???????????????
Position(??)	??????????????????
Rotation(??)	????????????
Scale(??)	???????????????
Align to Direction(????)	??? ?????????????????? Start Rotation ???????
Randomize Direction(?????)	???????????????? 0 ????????????? 1 ??????????
Spherize Direction(?????)	????????????????????????????? 0 ????????????? 1 ????????????? Shape ??? Sphere ???????
Randomize Position(?????)	??????????????????????? 0 ????????????????????????????????

Rectangle

Rectangle(??)

??	??
Shape(??)	???????
Rectangle(??)	?????????????????
Texture(??)	???????????????

Position(??)	?????????????????
Rotation(??)	???????????
Scale(??)	???????????????
Align to Direction(????)	??? ????????????????????? Start Rotation ???????
Randomize Direction(?????)	???????????????? 0 ????????????? 1 ?????????
Spherize Direction(?????)	?????????????????????????????? 0 ????????????? 1 ????????????? Shape ??? Sphere ???????
Randomize Position(?????)	?????????????????????????? 0 ??????????????????????????????????????

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?????????	?????????
?????????	?????????
??????????	?????????

Velocity over Lifetime(????????)

??????????????

??	??
Linear(??)	??? X?Y ? Z ???????
Space(??)	??`Linear X, Y, Z`?????????????
Orbital(??)	???? X?Y ? Z ??????
Offset(??)	?????????????????
Radial(??)	????/??????????
Speed Modifier(?????)	??????????????????????

??

????????????????? Linear X?Y ? Z ???

?????????????????????`Orbital`??????????`Radial`????????????????????????`Offset`????????????????

??`Speed Modifier`?

Limit Velocity Over Lifetime(?????????)

??????????????????

??	??
Separate Axes(???)	???????? X?Y ? Z ??
Speed(??)	?????????
Space(??)	?????????????????????????`Separate Axes`????????
Dampen(??)	??????????????????????
Drag(??)	???????????
Multiply by Size(????)	???????????????????????????
Multiply by Velocity(????)	???????????????????????????

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???

`Drag`???

Inherit Velocity(????)

?????????????????????????????

??	??
Mode(??)	???????????????
Initial(??)	???
Current(??)	???
Multiplier(??)	???????????????

??`Simulation Space`?`□□□`????`World`????????????

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??

Force Over Lifetime(???????)

????????????????????????

??	??
X, Y, Z	? X?Y ? Z ???????????
Space(??)	??????????????????
Randomize(???)	?? `Two Constants(□□□□□□)` ? `Two Curves(□□□□□□)` ???

??

??

Color Over Lifetime(???????)

?????????????????????????

?????? `Color` ??????????????????

??

?? `Alpha(□□□)` ???

Color By Speed(????)

??????????????????????????????

??	??
Color	????????????????
Speed Range	????????????????????????????????????

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??? `Color By Speed` ???

Size over Lifetime(???????)

?????????????????????????????

??	??
Separate Axes(???)	?????????????
Size(??)	????????????????????????

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???
???????????????????`Color Over Lifetime`????????????????????????

??“??”

Size by Speed(??????)

??????????????????????????????

??	??
Separate Axes(???)	?????????????
Size(??)	?????????????????
Speed Range(????)	????????????????????????????????????

??????`Limit Velocity Over Lifetime`???????????????????????

??

??`Size By Speed`
???

`Speed Range`?? X?????Y????? Z??????????????????????????????`Speed Range`
??? 10 ? 100 ??? Speed Range?

- ?? 10 ????????????????????
- ?? 100 ????????????????????
- 10 ? 100 ????????????????????????????????????? 55 ??????????????

Rotation Over Lifetime(???????)

???????????????

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

????????????????????????????

??	??
Constant(??)	??????????/????
Curve(??)	??????????????????? `???` ?? Separate Axes ????????? X?Y ? Z ????????
Random Between Two Constants(??????)	?????????????????????
Random Between Two Curves(??????)	??

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???

Rotation By Speed(?????)

??????????????????????????????

??	??
Separate Axes(???)	????????????
Angular Velocity(???)	???????/?????
Speed Range(????)	????????????????????????????????????

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??????????????????`Speed Range`?????????????????????????????????

External Forces(??)

??????`??`?`??????(Particle System Force Field)`???????????

??	??
Multiplier(??)	???????????

Influence Filter(?????)	?????`□□□□ (Layer Mask)`?????`□□ (List)`???????????
Influence Mask(????)	?????????????????????`Influence Filter`?????`Layer Mask`????????? ????????????`Everything`????????????????? -Nothing??????????????????? - Everything ????????????????? - Default - TransparentFX - Ignore Raycast (?????) - Water - UI
List(??)	????????????????????`Influence Filter`????`List`????????

??????????????????`□□□□□□(Particle System Force Field)`???????????

`□□`???`□□`????????????????????????????????????`Multiplier`????????????????????????????????

Noise(??)

????????????????????????????????

??	??
Separate Axes(???)	????????????????
Strength(??)	??
Frequency(??)	???
Scroll Speed(????)	???????????????????????????????????
Damping(??)	???
Octaves(??)	??
Octave Multiplier(????)	???????????????????
Octave Scale(????)	???????????????????
Quality(??)	???
Remap(????)	????????????????
Remap Curve(??????)	???
Position Amount(????)	??????????????????
Rotation Amount(???)	??????????????/????????????
Size Amount(???)	??????????????????

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???

?????????????? Separate Axes ?????????????????????????

?????????????“????”(Curl Noise) ??????????????????? (Perlin Noise) ??????????

`Quality`????????????????????????? Medium ? Low
??
?????????????????????

Collision(??)

?????`□□`???`□□`??`□□□□`???????????????????????`Planes`?????`World`?????`World`????`Collision Mode`
??????????????`2D`??`3D`??

Planes(??)

????????????????

??	??
??	??`Planes`??
Planes(??)	?????????????????
Visualization(???)	????`□□`??????????????????????????
Scale Plane(????)	??????????
Dampen(??)	????????????
Bounce(??)	???????????????
Lifetime Loss(?????)	???????????????
Min Kill Speed(??????)	????????????????????????
Max Kill Speed(??????)	????????????????????????
Radius Scale(????)	????????????????????????????
Send Collision Messages(??????)	????????????????`OnParticleCollision`????????
Visualize Bounds(?????)	?`□□`????????????????????

World(??)

??????????

??	??
??	??`World`??
Collision Mode(??)	3D ? 2D
Dampen(??)	????????????
Bounce(??)	???????????????
Lifetime Loss(?????)	???????????????
Min Kill Speed(??????)	????????????????????????
Max Kill Speed(??????)	????????????????????????

Radius Scale(????)	??????????????????????????
Collision Quality(????)	??? ??????????????
High(?)	????????????????????????????????????
Medium (Static Colliders)(??(?????))	???????????????????????????????
Low (Static Colliders)(?(?????))	??????????????????????????????? `Medium` ? `Low` ????????????????????????? `Medium` ????????? `Low` ??????????????????????
Collides With(????)	????????????????
Max Collision Shapes(??????)	??????????????????????????????
Enable Dynamic Colliders(???????)	?????????????????????????????????? Kinematic ??????? ??? ???
Voxel Size(????)	?? (voxel) ?????????????????? `Medium` ? `Low` ??????Unity ??? ????? `Collision Quality` ??? `Medium` ? `Low` ?????????
Collider Force(?????)	?????????????????????????????
Multiply by Collision Angle(?????)	??
Multiply by Particle Speed(??????)	???
Multiply by Particle Size(??????)	???
Send Collision Messages(??????)	?????????????????? `OnParticleCollision` ????????
Visualize Bounds(?????)	? `□□` ??????????????

??

??? `Collision` ??????????????????

?????????? `World` ??????????????????????????????????? `Collides With` ?????????????????????????? `Planes` ??? `World` ??

?? `Planes` ??????? `Planes` ??????????????????????????? `XZ` ???????????? `Y` ??? ??????????????

??“??”????? `Radius Scale` ??

??????????? `Dampen` ? `Bounce` ??? `Lifetime Loss` ? `Min Kill Speed` ???

????? `Send Collision Messages` ??? (power-up)

World Collision Quality(????)

World Collision ???? Collision Quality ????????? High?Medium ? Low?? Collision Quality ??? Medium (Static Colliders) ? Low (Static Colliders) ???????????3D ????????????????????????????

???????????????????????????????????????Unity ??????????????????????? Unity ??

??????????????????????????? Voxel Size ????????????????????????????????

Medium ? Low ????????????????????????Low ????????? Medium ??

Triggers(???)

??????? `Triggers` ??? `OnParticleTrigger()` ?????????????????????????????

?????

?????????????????????????????????????? `Colliders` ????????????????????? Colliders ????? Add (+) ???????????????????????????? Remove (-) ???????????????????????????????? Add (+) ??

???

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??	??
Inside(??)	???????????????
Outside(??)	???????????????
Enter(??)	???????????????
Exit(??)	???????????????
Ignore	????????? `OnParticleTrigger()` ?????????
Kill	????????? `OnParticleTrigger()` ?????????
Callback	???? `OnParticleTrigger()` ?????????
Radius Scale(????)	?? • ?? 1 ?????????????????????????????? • ???? 1 ????????????????????????????????? • ???? 1 ?????????????????????????????????
Visualize Bounds(?????)	????? `□□` ??

Sub Emitters(????)

???

????????????????????????????????

??	??
????	?????????
Birth(??)	?????????
Collision(??)	????????????
Death(??)	???????
Trigger(???)	???????????????
Manual(????)	?????????????
Inherit(??)	??? `Inherit Velocity` ??
Emit Probability(????)	???????????????? 1 ?????????????????????

???? `Collision` ? `Trigger` ? `Death` ? `Manual` ??????????? `Emission` ????????

??

??

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Texture Sheet Animation(??????)

??

??????????????????????

Grid(??)????

??	??
Mode(??)	?? `Grid(□□)` ??
Tiles(??)	??? X????? Y??????????????
Animation(??)	`Animation` ?????? `Whole Sheet(□□□□□)` ? `Single Row` (??)?? Sprite??????????????????
Row Mode(???)	???????????????????? `Animation` ????? `Single Row` ????????
Custom(???)	????????????
Random(??)	????????????????

Mesh Index(????)	???????? `□□□□(Mesh Index)` ???????????????????????????????????
Row(?)	???????????????????? `Single Row` ????? `Custom` ????????
Time Mode(????)	??????????????????
Lifetime(???)	?????????????????????
Speed(??)	?????????????????????????????????
FPS	????????????????
Frame over Time(???????)	??????????????????????
Start Frame(???)	???????????????????????????????????
Cycles(??)	?????????????????
Affected UV Channels(????UV??)	????????????? UV ?

Sprite????

??	??
Mode(??)	?? `Sprites` ??
Time Mode(????)	??????????????????
Lifetime(???)	?????????????????????
Speed(??)	?????????????????????????????????
FPS	????????????????
Frame over Time(???????)	??????????????????????
Start Frame(???)	???????????????????????????????????
Cycles(??)	?????????????????
Enabled UV Channels(????UV??)	????????????? UV ?

??

???

????? `Single Row` ?? `Random Row` ???

`Row Mode` ???

UV ????????????????????????????

?`Mode`???????`Sprites`????????????????Sprites?????????????????????????Sprite????????`Sprite Packer`?????????Sprite???????`Sprite Packer`?????????????????????????????????`□□□□□ (Dynamic Batching)`??????????????????????????????????????Sprite??????????????`Multiple Mode Sprite`??? `Sprite Packer`?????????????Sprite???Sprite????? 9 ??Sprite???????????????????????Sprite??

Lights(??)

???????????????????

??	??
Light(??)	??????????????????
Ratio(??)	???? 0 ? 1 ??????????????????
Random Distribution(????)	??????????????????? true ?????????? Ratio ??????????????????????????????? false ??? Ratio ????????????????????? N ?????????
Use Particle Color(??????)	??? True ??????????????????????????????? False ????????????????
Size Affects Range(??????)	??????????????`□□ (Range)`??????????
Alpha Affects Intensity(Alpha????)	??????????`□□ (Intensity)`????? Alpha ????????????
Range Multiplier(????)	?????????????????????????????
Intensity Multiplier(????)	?????????????????????????????
Maximum Lights(??????)	????????????????????????? Editor ????????????????

??

Lights ???

?? ???? Maximum Lights ?????????????????????????????????????

Trails(??)

???????????????????????????? (Trail Renderer) ??

??	??
Mode(??)	?????????????
Particle(??)	?????????????????????
Ribbon(??)	??????????????????

Ratio(??)	???? 0 ? 1 ???????????????????Unity ????????????????
Lifetime(???)	??
Minimum Vertex Distance(??????)	??????????????????????
World Space(????)	???????????`Local Simulation Space`??
Die With Particles(?????)	??
Ribbon Count(???)	?????????????????????? 1 ???????????????????? 1 ????????? N ?????????????? 2 ????????????? 1?3?5 ??????????? 2?4?6?????????????????????
Split Sub Emitter Ribbons(????????)	????????????????????????????????????
Attach Ribbons to Transform(??????????)	???????????????
Texture Mode(????)	??????????????
Stretch(??)	??????????????
Tile(??)	? N ??????????????`Material`??`Tiling`???????
DistributePerSegment(????)	?????????????????????????
RepeatPerSegment(????)	????????????????????????`Material`??`Tiling`???????
Size affects Width(???????)	???????????
Size affects Lifetime(?????????)	?????????????
Inherit Particle Color(??????)	???????????
Color over Lifetime(???????)	?????????????????????????????
Width over Trail(????)	?????????????????
Color over Trail(????)	?????????????????
Generate Lighting Data(??????)	???
Shadow Bias(????)	?????????????????????

??`Renderer`????`□□□□ (Trail Material)`

??

Unity ??????????? (Color Gradient) ????????????????????????????? (Line Renderer) ??????????????????

Custom Data(?????)

`Custom Data`??????`Editor`
???

?????`□□ (Vector)`???????? 4 ?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(??)	?????????
Trail Material(????)	????????????????? `Trails` ??????????
Sort Mode(????)	?????????????????????? `By Distance (from the Camera)` ? `Oldest in Front` ? `Youngest in Front` ?? □□□□ ? □□□□□□ ? □□□□□□ ???????????????????
Sorting Fudge(????)	???
Min Particle Size(??????)	?????????????????????????????????????? Rendering Mode ??? Billboard ????????
Max Particle Size(??????)	?????????????????????????????????????? Rendering Mode ??? Billboard ????????
Render Alignment(????)	??????????????????
View(??)	?????????
World(??)	????????
Local(??)	?????????????
Facing(??)	??????????????????
Velocity(??)	??????????????????????
Flip(??)	??????????????????????????????
Enable GPU Instancing(????GPU???)	??????? GPU ??????????????????????????????????
Allow Roll(????)	?????????????????????? Z ?????????? VR ?????????????? HMD ?????????????????

Pivot(??)	?????????????????????
Visualize Pivot(?????)	? Scene ??????????
Masking(??)	??????????????????????????
No Masking(???)	??????????????????????????
Visible Inside Mask(?????)	???????????????????????????
Visible Outside Mask(?????)	??
Apply Active Color Space(????????)	?????????????????????????? GPU ?????????????
Custom Vertex Streams(??????)	??????????????????
Cast Shadows(????)	???????????????????????????
Off	????
On	????
Two-Sided	??????????????????????????
Shadows Only	?????????????
Receive Shadows(????)	??????????????????????????
Shadow Bias(????)	?????????????????????????????????
Motion Vectors(????)	??
Camera Motion Only(??????)	?????????????
Per Object Motion(?????)	??????????????????
Force No Motion(?????)	??????
Sorting Layer ID	??????????
Order in Layer(????)	?????????????
Light Probes(?????)	??????????
Reflection Probes(?????)	?? uniform ??
Anchor Override(????)	?? `????` ? `????` ?????????????

??????? `read/write enabled` ?????????????? `Editor` ??????Unity ??????????????????????????????????????

??

?? 2D ?????????????????????

1. `Billboard` ????????????????????????????????
2. `Horizontal Billboard` ???
3. `Vertical Billboard` ?????????????????? XZ ?????????????? y ?????????????????????????????????????
4. `Stretched Billboard` ?????????????“?????”????????????????????????? `Stretched Billboard` ????????????????????????????????? `Velocity Scale` ?????????????????? `Velocity Scale` ??? 0 ??????????????????

`Normal Direction` ?? 3D ????????????? `Billboard` ????????

Revision #1
Created 3 April 2024 08:26:26 by ???
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