The Starfield Component

This component allows you to create realistic starfields without using up lots of texture memory (e.g. a skybox).

Starfield

Star Count

This field allows you to set the amount of stars in the starfield.

Seed

This field allows you to set the random seed used by the starfield generator. You can press the R button at the right to randomly pick a new seed.

Render Queue

This allows you to change the render queue used by the starfield material. Consult the official Unity documentation if you're unsure what this means.

Observer

If your scene contains a camera tagged with **MainCamera**, then this field will automatically be filled in. If not, then create one and either change its tag to **MainCamera**, or drag it into this field.

In Background

If you tick this then your starfield will be drawn in the background of your scene.

Note: The starfield mesh will automatically be stretched to your camera's far view clipping plane, so you don't need to scale the GameObject.

If you untick it then the starfield will be part of the main 3D scene and you can move it around my editing the transform.

Auto Regen

If you tick this then the corona mesh will automatically be regenerated every time you make a modification to this component's settings. The regeneration will take place before the scene is rendered (in LateUpdate).

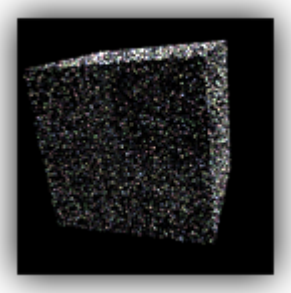
Regenerate

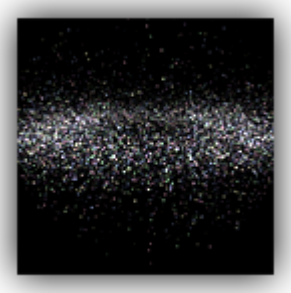
Note: This button is only visible if you've disabled **Auto Regen**.

If you press this button then your corona mesh will be regenerated.

Distribution

This field allows you to change the distribution pattern of all the stars in your starfield.





- **On Sphere**
  This will cause all stars in your starfield to be distributed on the surface of a sphere.

- **On Dome**
  This will cause all stars in your starfield to be distributed on the surface on the top half of a sphere.

- **On Circle**
  This will cause all stars in your starfield to be distributed on the surface of a 2D circle.

- **On Cube**
  This will cause all stars in your starfield to be distributed on the surface of a 3D cube.

- **In Sphere**
  This will cause all stars in your starfield to be distributed inside a sphere.

- **In Dome**
  This will cause all stars in your starfield to be distributed inside the top half of a sphere.

- **In Circle**
  This will cause all stars in your starfield to be distributed inside a 2D circle.

- **In Cube**
  This will cause all stars in your starfield to be distributed inside a 3D cube.

- **Elliptical Galaxy**
  This will cause all stars in your starfield to be distributed similar to an elliptical galaxy.

Radius

This allows you to set the outer radius of your starfield distribution.

Outer

Note: This field is only visible when **Distribution** is set to **In Sphere**.

This allows you to set the inner radius of your starfield distribution. Setting this value to maximum pushes all stars to the outer radius.

Symmetry

This allows you to change the polar distribution probability. A lower value means there will be less stars near the poles of your generated starfield.

Packer

The starfield component will automatically create a texture atlas of all the star textures you set.

Texture List

Note: This list is only visible if you have at least one texture in the packer.

Texture

This is the current texture assigned to this texture slot. You can remove this texture slot by clicking the X button on the right.

Tilesheet

If you tick this then your texture will be sliced up into smaller textures.

Tiles X

This allows you to set the amount of columns in your star tilesheet texture.

Tiles Y

This allows you to set the amount of rows in your star tilesheet texture.

Add Texture

This field allows you to add star textures to the starfield atlas packer. You can open the select texture window by pressing the ⊙ button. If you then type in **'Starfield'**, you'll see a list of suitable prepackaged textures.

Star

Radius Min

This allows you to set the minimum radius of all generated stars in your starfield.

Radius Max

This allows you to set the maximum radius of all generated stars in your starfield.

Pulse Radius Max

This allows you to set the maximum pulse radius of all generated stars in your starfield. Every star is given a pulse radius between **0** and **Pulse Radius Max** and over time their radius will change by this value.

Pulse Rate Max

This allows you to set the maximum rate at which generated stars can pulse (e.g. a pulse rate of 2 means the stars can pulse up to twice per second).

Edit Star Variant

If you tick this then you can edit the generation settings for each star variant. A star variant is a unique star texture. (e.g. if you add two textures to the packer then you have two variants. If one of those textures is a 2x2 tilesheet then you have 1 + 4 = 5 variants).

Index

This field allows you to change the current star variant index being edited.

Preview

This field shows you a preview of what the currently selected star texture looks like.

Spawn Probability

This allows you to change the probability of this star variant from being spawned when then starfield is regenerated.

Note: All variants are given a probability of 1 to begin with. To make one variant get spawned more frequently than others, you must reduce the spawn probability of all the others.

Custom

If you tick this then you can override the global star settings for the currently selected variant.

Radius Min

See above.

Radius Max

See above.

Pulse Radius Max

See above.

Pulse Rate Max

See above.

Edit Star

If you tick this then you can manually modify stars after they've been generated.

Note: You can view which star is currently being selected in the Scene window.

Note: If your starfield gets regenerated then any changes you make here will be reverted. So I recommend you untick **Starfield** → **Auto Regen**.

Index

This is the index of the star in the starfield you're currently editing.

Position

This field allows you to modify the local position of the selected star.

Texture Index

This field allows you to change the current texture variant being used by the selected star.

Angle

This field allows you to change the angle (roll) of the selected star.

Radius

Min

This allows you to modify the minimum pulse radius of the selected star.

Max

This allows you to modify the maximum pulse radius of the selected star.

Pulse Rate

This allows you to modify the rate at which the selected star pulses.

Normalize Position

This button allows you to normalize the position of the currently selected star (e.g. if you're using the On Sphere distribution).

Clamp Radius

This button will clamp the **Edit Star** → **Index** → **Radius** → **Min + Max** to the global radius limits.

Duplicate

This button will duplicate the currently selected star and add it to the end of the index list.