Making a Flare

This tutorial shows you how to make a basic flare. A flare is an advanced type of billboard that doesn't require large textures to make large and high detail star effects.

Most of the SGT demo scenes have impressive looking star billboards that use the Sprite Renderer component with a large texture. You can replace these by deleting the Sprite Renderer component, and following the steps below to replace it.

Step 1 - Add a Flare

Right click in the Hierarchy window and select **Space Graphics Toolkit → Flare**, you should now see a Flare GameObject with the SgtFlare component attached.

Step 2 - Set up the Flare

At the bottom of the SgtFlare component in the Inspector window, you will see two buttons. If you click these then your flare wll be set up with basic values.

The first button adds the **SgtFareMesh** component, which generates the **SgtFlare** component's **Mesh** setting.

The second button adds the **SgtFareMaterial** component, which generates the **SgtFlare** component's **Material** setting.

Step 3 - Done!

You now have a basic flare that uses very little texture memory.

To make it look more impressive you can enable the **Wave** and/or **Noise** setting in the **SgtFlareMesh** component. I recommend you experiment with all of these settings until you get a visual result you're happy with.

Optional Step - Make it a Billboard

By default the flare will remain static and flat. To make it look better it needs to rotate toward the camera to become a billboard. To do this, you can add the **SgtBillboard** component on the Flare GameObject.

If your flare is very large or your camera gets very close to the flare then I recommend you enable the **Avoid Clipping** setting.

NOTE: If your scene has many billboards then I recommend you replace the **SgtBillboard** with **SgtFastBillboard**, and add a **SgtFastBillboardManager** to your scene.

Optional Step - Make it Render In Front

By default the flare will render like a normal transparent object, but to make it look really bright it should render in front of everything. To do this, change the **Z Test** setting to **Always**, and change the **Render Queue** setting to **Overlay (4000)**.

If you do this then I recommend you also use the **SgtDepthScale** component combined with **SgtDepthCamera**, and set the flare's layer to **Ignore Raycast**. You can read the **Camera Depth Flares** tutorial inside the **Bonus Pack** for more information.