Additional Content Volume 3: Painting Lines in Blender

In this **Online Tutorial** we will learn how to quickly **Paint Straight Lines directly on a 3D Model** in Blender.

I will show you how to create a **Hand Painted Texture Map** in Blender. The Painted Lines will be used as a Texture Map in Mixer to create **Paneling Details**. Paneling are the edges of Mechanical Parts where they join up.

The reason we're doing this in Blender is because in Blender you can Paint **straight lines** on your 3D Model. In Mixer, Painting straight lines (on Custom Models) are not currently a supported feature.

We will be covering the following main topic:

- Learn how to quickly Paint Lines directly on a 3D Model in Blender

At the end of this Online Tutorial, you will understand how to Paint directly on your 3D Model in Blender with the **Draw Brush Tool** inside the Texture Paint Workspace.

Let's get started!

Technical requirements

The following is the technical skills and software you would need to complete this chapter.

- A computer that can run basic 3D animation software.

- Have a basic understanding of how to navigate and manipulate meshes in Bender. This has been covered in *Chapter 1, Introduction to BLENDER'S 3D Modeling and Sculpture Tools*.

- You need to have installed **Blender** (Open-Source Software) from: https://blender.org/ (At the time of writing). The Blender version in this chapter is 2.93.5. Even if your version of Blender is newer, the examples should still work without any problems.

Using the Draw Brush to Paint Straight Lines

Let's get started with this Tutorial

0. Load the Robot-Drone Model and select the Model.

1. Go to the Texture Paint Workspace.

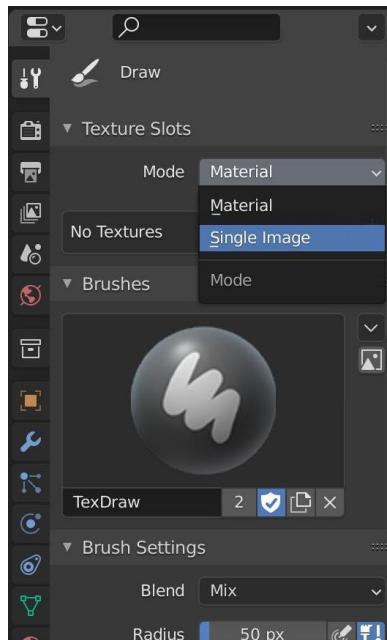2. Set the Mode to Single Image in the Property Panel. See *Figure 2.1*

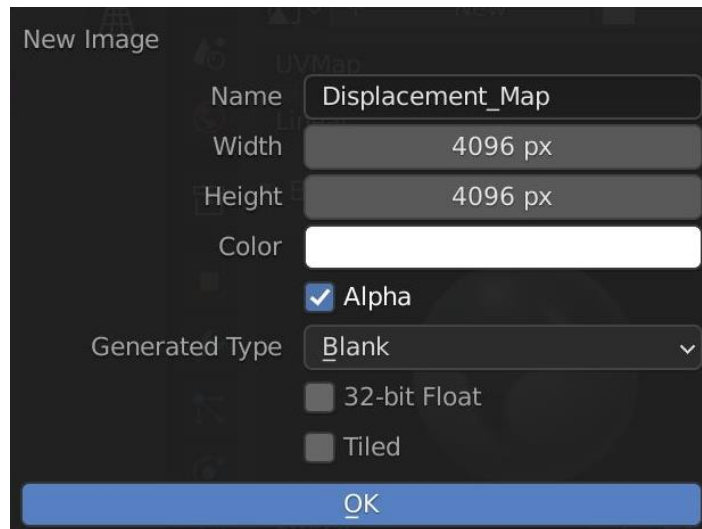3. Click on New to create a new Texture to Paint on, using the setting as shown in *Figure 2.2*

Figure 2.2: Create a new Texture with these settings

4. Change your color Picker color to **Black** . As seen in *Figure 2.3*.
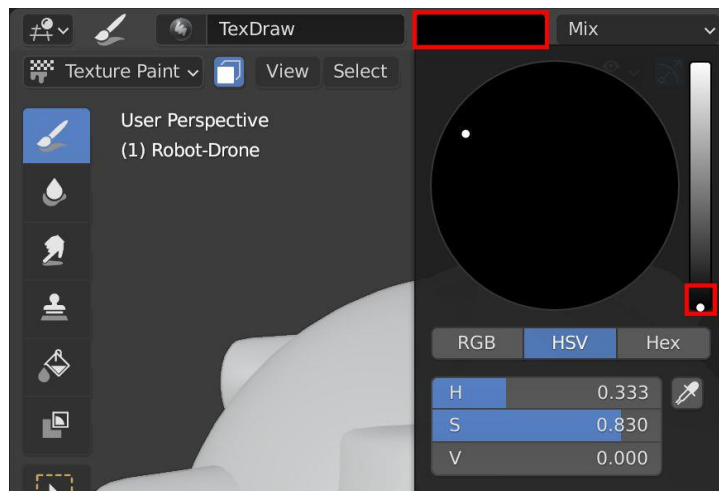
5. In the Menu bar above the Texture Paint Viewport, change your **Stroke Method** from Space to **Line** in the Stroke Method drop-down Menu. As seen in *Figure 2.4*.
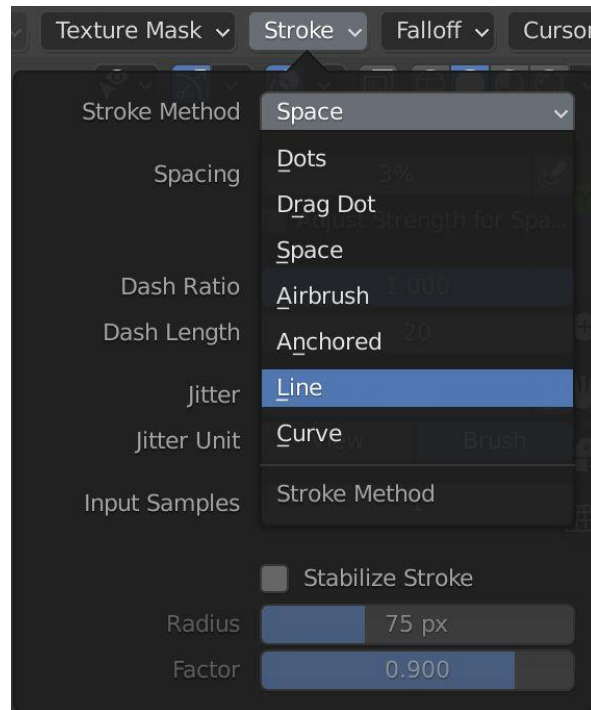

Figure 2.4: Select Line as the Stroke Method

6. Set your Brush **Radius to 12 px** and **Strength to 1.000**

7. Position and Rotate the Model to give you a good angle to draw Lines where you want them to be. (Feel free to create your own design). Now Left-Click and hold the Mouse where the line will start and (while still holding) move your Mouse Pointer to where the Line will be drawn to and release the mouse to complete. In *Figure 2.5*, I have drawn a short black line and then continued along the rest of the front of the Drone's Body.
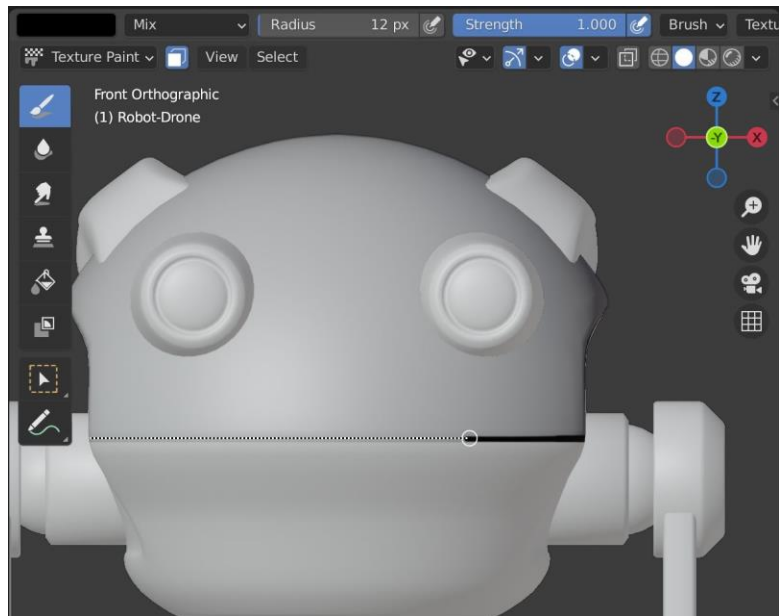
Figure 2.5: Drawing your first lines

8. If you make a mistake, it is very easy to fix. All you need to do is to switch your color to **White** and Paint over the Black Lines. Like seen in *Figure 2.6.*
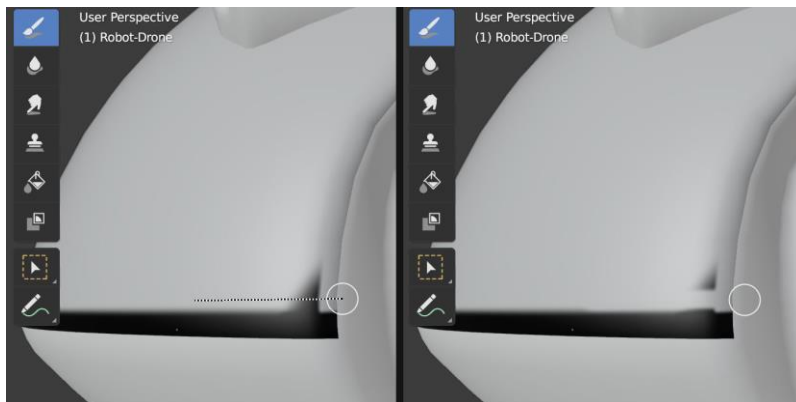

Figure 2.6: Fixing mistakes, by Painting White lines

9. Continue to Paint Black lines all over the rest of the Drone. In *Figure 2.7* you will see my completed map (but yours can look different of course). You can **download this map from the Online Repository** for this Book it you want to use it for Chapter 5's Tutorial.
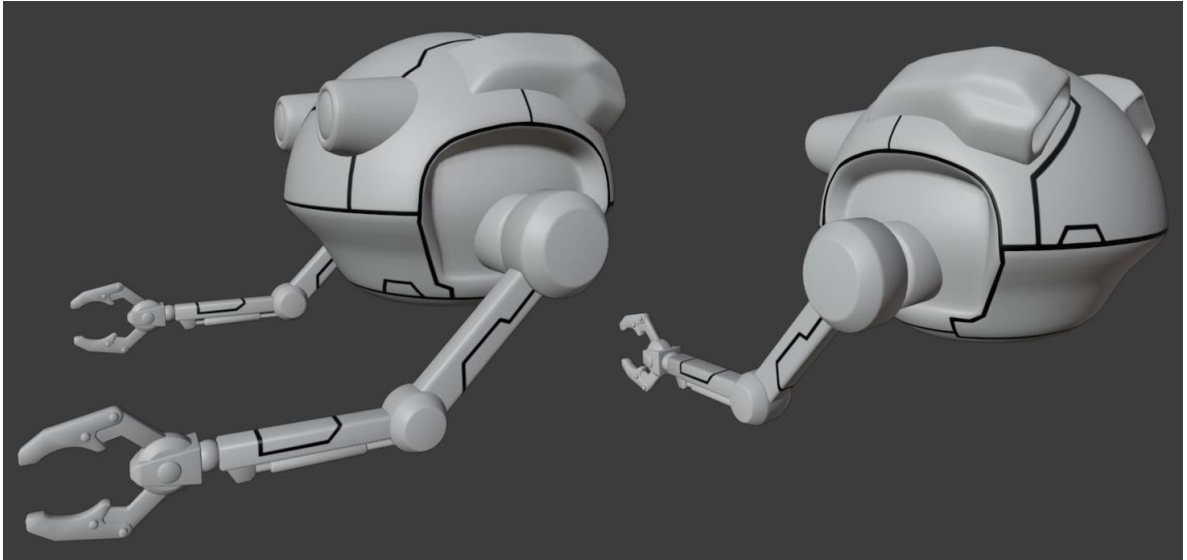

Figure 2.7: The Completed Lines Texture that we will use in Chapter 5's Tutorial.

10. Now that the lines have been drawn over the Model, we want to soften them a bit by using the **Soften Brush** (Blurs) in the Texture Paint Workspace's Toolbar. Set this brush to a very low Strength setting and big Brush Radius and soften the lines so they are slightly blurred. This will help with the Normal Map we will create in Mixer later. See *Figure 2.8*.
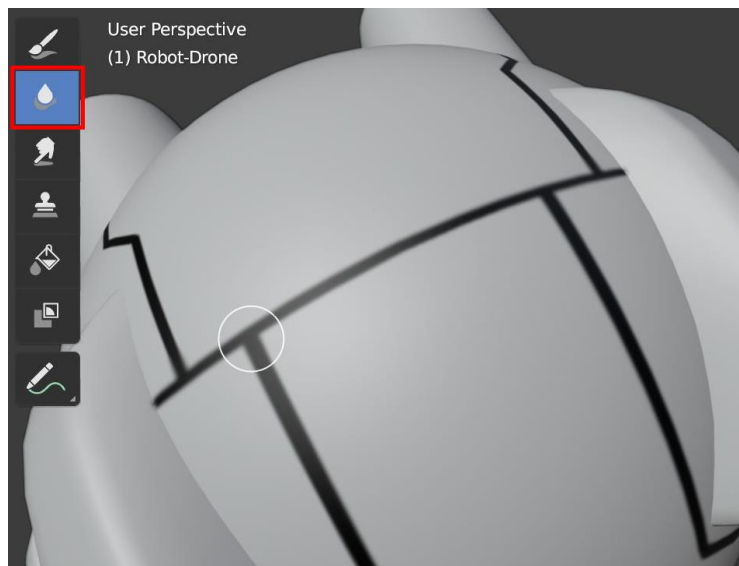
11. For the last step, you need to **Export your Texture** to your Hard-Drive. In the **UV Editor window under the Image > Save As.**
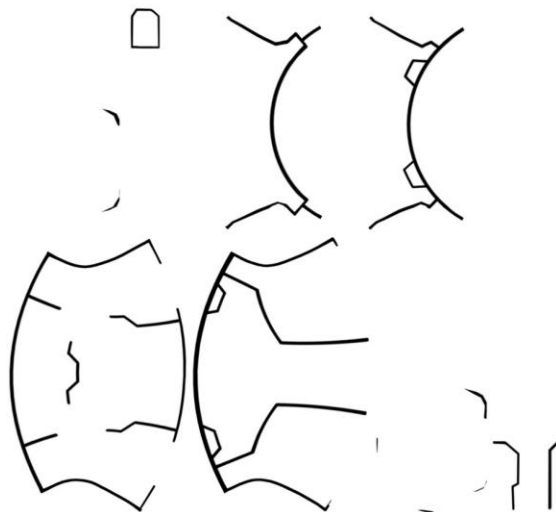
The Lines Texture is now complete and you can use it in the Procedural texturing Tutorial in Chapter 5.

Summary

In this Section you have just learned how to Paint Straight Lines onto your Model in Blender. You can also choose the default Stroke Method (Default Stoke Method is Space) to Paint with regular Brush Strokes. You can use the Texture Painting feature in Blender to create hand-Painted Texture for your 3D Assets.

You can also choose to Import any Painted Textures into Mixer as a Texture Layer. As you can see, the possibilities are really endless.