

UV Data Requirements

For Paint in 3D to work, the mesh you want to paint must have UV data. Not only that, but for best results the UV data must not overlap, or exceed the 0..1 range (i.e. no texture tiling).

If your mesh fails any of these requirements, then I recommend you modify the mesh in your favourite 3d modelling program, and unwrap the UV data so that it's suitable for painting.

What if I don't know how to UV map?

If you don't know how to UV map then you can use Unity to automatically do it for you. Just keep in mind that doing it manually will allow you to achieve better results.

To automatically generate UV data, you can enable the **Generate Lightmap UVs** setting in your mesh import settings.

NOTE: This will generate UV data in the UV1 (i.e. second) UV channel. Most shaders are designed to use UV0 only.

How can I generate UV0 data?

If you followed the steps above, then you can use Paint in 3D to copy the newly generated UV1 data into the UV0 channel.

To do this, select your mesh in the **Project** window, and click the context menu (gear) icon at the top right of the inspector, and select the **Coord Copier (Paint in 3D)** option.

Your Project window should now contain a **Coord Copier (YOUR_MESH_NAME)** prefab, and you can click **Generate** to copy the coords over.

The generated mesh with the copied coords is now placed as a child of the **Coord Copier** prefab, and you can drag and drop it into your **Mesh Filter** or **Skinned Mesh Renderers**.

How can I use UV1 data with the Standard shader?

Step 1 - Change the **Secondary Maps** → **UV Set** setting to **UV1**.

Step 2 - Change the **P3dPaintableTexture** → **Slot** setting from **_MainTex** to **_DetailAlbedoMap**.

Step 3 - Change the **P3dPaintableTexture** → **Channel** setting to **UV1**.

Step 4 - Change the **P3dPaintableTexture** → **Shader Keyword** setting to **_DETAIL_MULX2**.

How can I use UV1 data with a different shader?

Most shaders only use UV0, so you will need to make an alternative shader that uses UV1.

For example, instead of using **uv_MainTex** you use **uv2_MainTex**, or instead of using **texcoord0 : TEXCOORD0**, you use **texcoord1 : TEXCOORD1**.

NOTE: Since you're painting using the UV1 channel, you must set the **P3dPaintableTexture** → **Channel** setting to **UV1**.