

Weapon Camos & Skins - Ultimate Material Pack

Documentation



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1. Overview

The **Weapon Camos & Skins - Ultimate Material Pack** is a comprehensive solution designed to **effortlessly customize weaponry** in Unreal Engine, completely removing the need for manual UV unwrapping.

It provides a wide range of visual styles, ranging from *realistic military camouflage* and *tactical solid colors* to *complex, animated* and *emissive patterns*.

Built around a powerful Master Material using **World Aligned UVs**, the pack ensures that textures project seamlessly onto **any mesh**. It is suitable for projects of all sizes, offering **drag-and-drop simplicity** for beginners and **deep parameter customization** for advanced users who need full control over colors, roughness, and animation speeds.

2. Folder Structure & Content

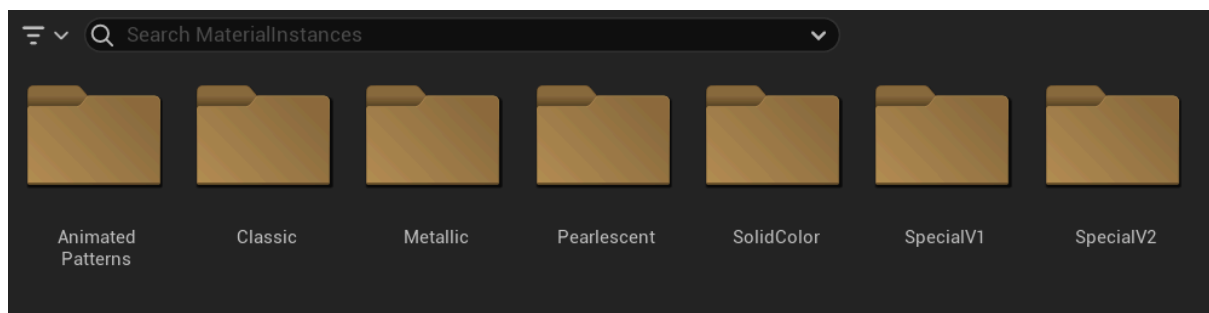
To keep your project clean, the assets are organized into a logical hierarchy.

Material Instances (Ready-to-Use) All pre-made camo styles can be found in the following path:

`Content/UltimateWeaponCamos/Materials/MaterialInstances/`

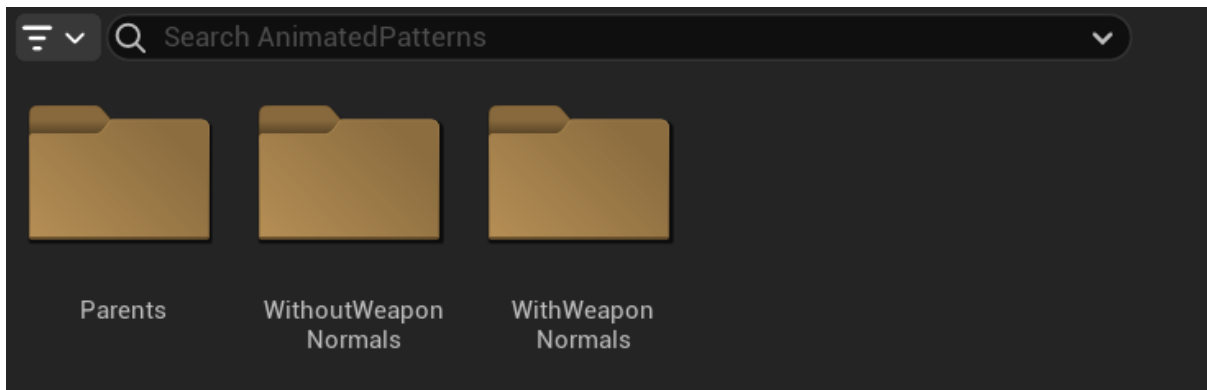
Inside this folder, the styles are divided into these categories:

- Animated Patterns
- Classic (Military)
- Metallic
- Pearlescent
- Solid Color
- Special V1
- Special V2



Standardized Category Structure Inside *each* of the category folders above, you will find the exact same sub-folder structure to help you navigate easily:

1. **Parents**
2. **With Weapon Normals**
3. **Without Weapon Normals**



What is inside the "Parents" folder? This folder contains the intermediate parent materials for that specific category.

- **Tip:** Instead of editing every single camo individually, you can adjust the settings in these Parent files to change the look of the **entire category** at once (e.g., changing the roughness for *all* Metallic skins globally).

Master Material The core shader that drives the entire system is located here:

`Content/UltimateWeaponCamos/Materials/MasterMaterials/`

- **Asset Name:** `M_UWC_Master`
- *Note:* You generally do not need to touch this file unless you want to modify the core logic of the shader.

3. Material Instance Adjustments

You do not need to edit the complex Master Material to change the look of your skins. Most of the settings are exposed directly within the **Material Instance**.

General Customization

1. Double-click any **Material Instance** to open the editor window.
2. Enable the checkbox next to any parameter you wish to change (e.g., *Metallic*, *Roughness*, *Tiling_RGBA_Mask*).

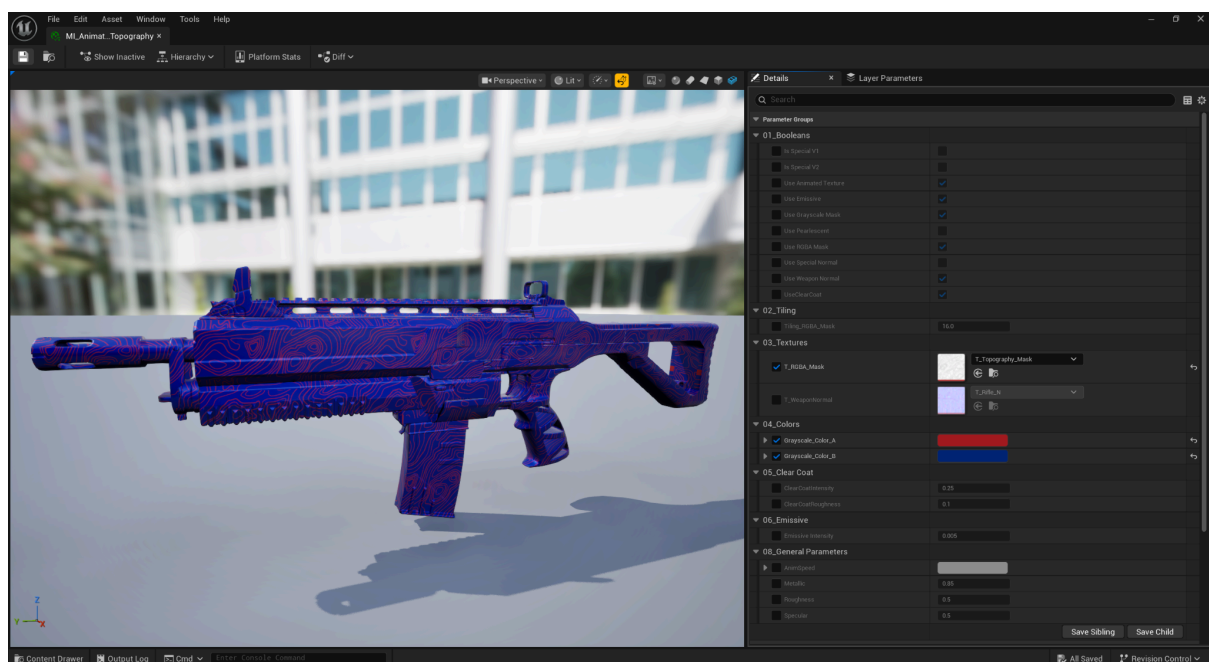
3. Adjust the values to see changes in real-time on your mesh.

IMPORTANT: Assigning your Weapon's Normal Map

If you are using a Material Instance from the **"With Weapon Normals"** folder, the material instance includes a slot to blend your weapon's specific baked details (like screws, bolts, and edges) with the camo pattern.

1. Open the Material Instance.
2. Locate the parameter **T_WeaponNormal1**.
3. **Replace** the default example texture with your own weapon's baked Normal Map.
4. **Save** the Material Instance.

Note: By default, these instances contain the Normal Map of the showcase weapon. To ensure the geometric details match your own model perfectly, you must swap this texture with your specific weapon's Normal Map.



3.1 How Masks & Colors Work

The system uses different masking methods depending on the category to allow for maximum color flexibility.

Animated Patterns (Grayscale Masks) The *Animated Patterns* use a **Grayscale Mask** texture. The colors are applied using a **Linear Interpolate (Lerp)** node:

- **Color A** is applied to the black areas (0).
- **Color B** is applied to the white areas (1).
- Any gray values in between will result in a smooth blend of both colors.

Classic Camouflages (RGBA Masks) For categories like *Woodland*, *Spray*, and *Digital*, the system uses **RGBA Mask Textures**. This allows you to define up to **four independent colors** for a single pattern:

- **Red Channel:** Assigned to Color 1.
- **Green Channel:** Assigned to Color 2.
- **Blue Channel:** Assigned to Color 3.
- **Alpha Channel (1-x Logic):** The fourth color is applied to the areas where no Alpha is present (inverted Alpha), filling the background of the pattern.