SciFi Tesla Coil Documentation

[Quick setup of the "Nanite" & "Lumen" on UE5](#)

[How to work with a sequencer?](#)

[What do I need to add to my character to make him interact with panels, buttons, doors, etc.?](#)

Important Notice:

The Parallax Occlusion Mapping function has a negative effect on FPS. You can disable this function if you need to significantly increase FPS. (MI_MasterMaterial_Parallax & MI_MasterMaterial_DirtParallax > IsParallax = False)

Every blueprints with a light source has an IsLightShadow option. Disabling this option will significantly increase FPS.

❖ Quick settings:

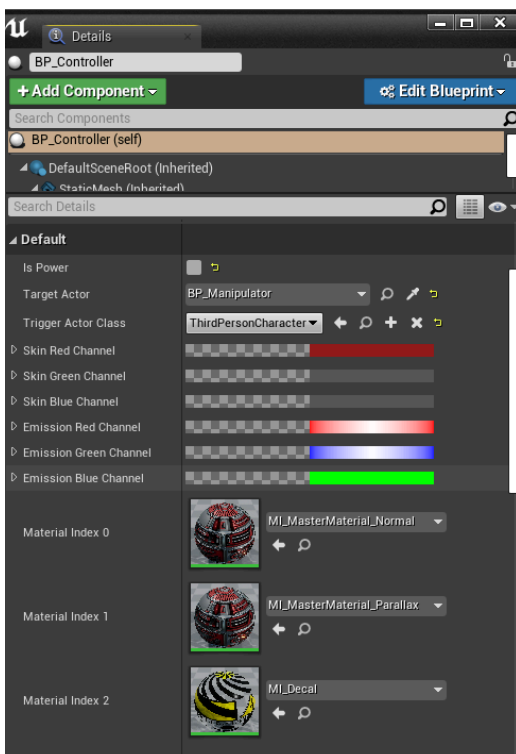**1. Install these BP on your scene (BP_Controller & BP_TeslaCoil, BP_Platform)**
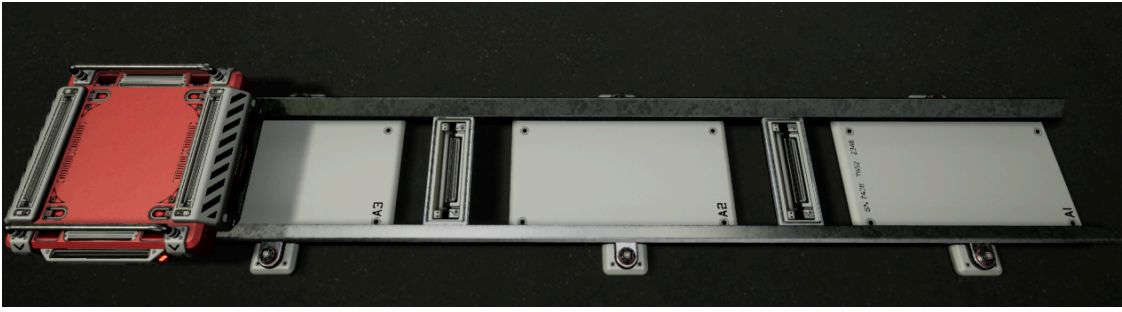
2.In the BP_Controller settings (Details TAB), find the "Target Actor"

Choose BP_TeslaCoil or BP_Platform

If the BP_Controller does not work means "IsPower" parameter is turned off

## ❖ BP_Controller Settings (Details TAB)

- **IsPower -** If it is disabled you can not interact.
- **TargetActor -** BP_Portal01 OR BP_Platform (in scene)
- **TriggerActorClass -** Your player class with which will interact BP_Controller

- **Skins Channels & Emission Channels -** Material settings (ID Map & Emission Map)

  (MI_MasterMaterial_Normal & MI_MasterMaterial_Parallax or MI_MasterMaterial_Dirt & MI_MasterMaterial_DirtParallax)

- **Material Index 0,1,2 -** You can choose a normal material or a material with dirt. The material with dirt has a Vertex paint (see below)
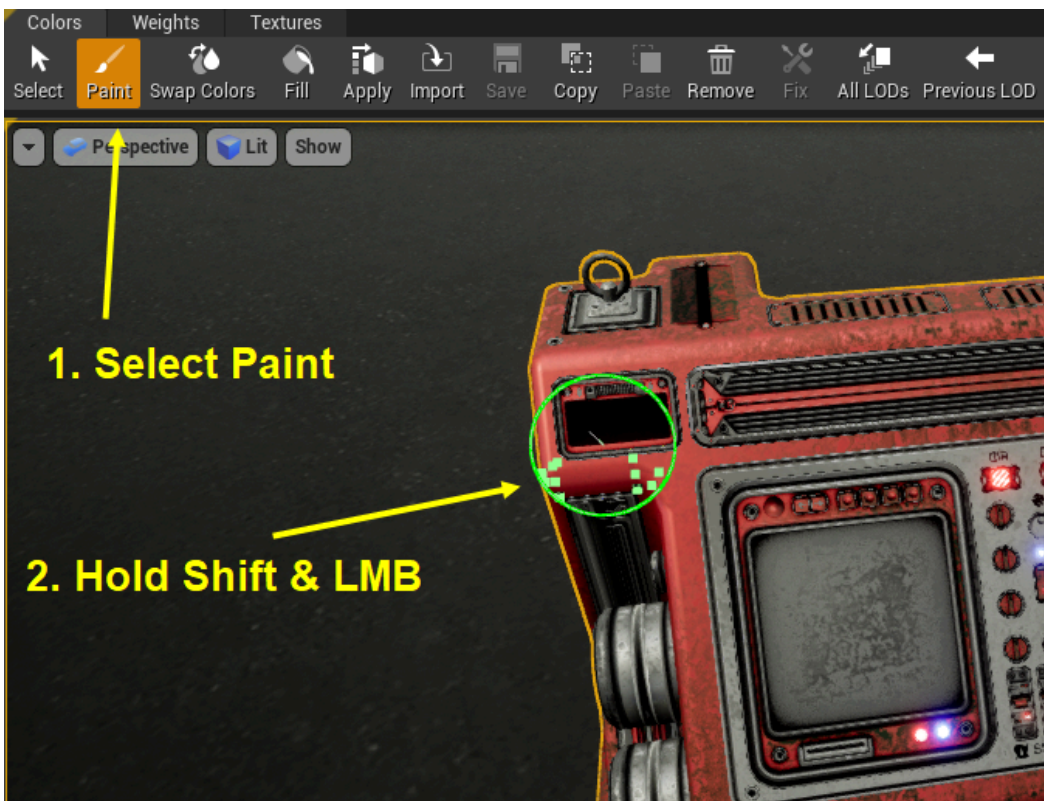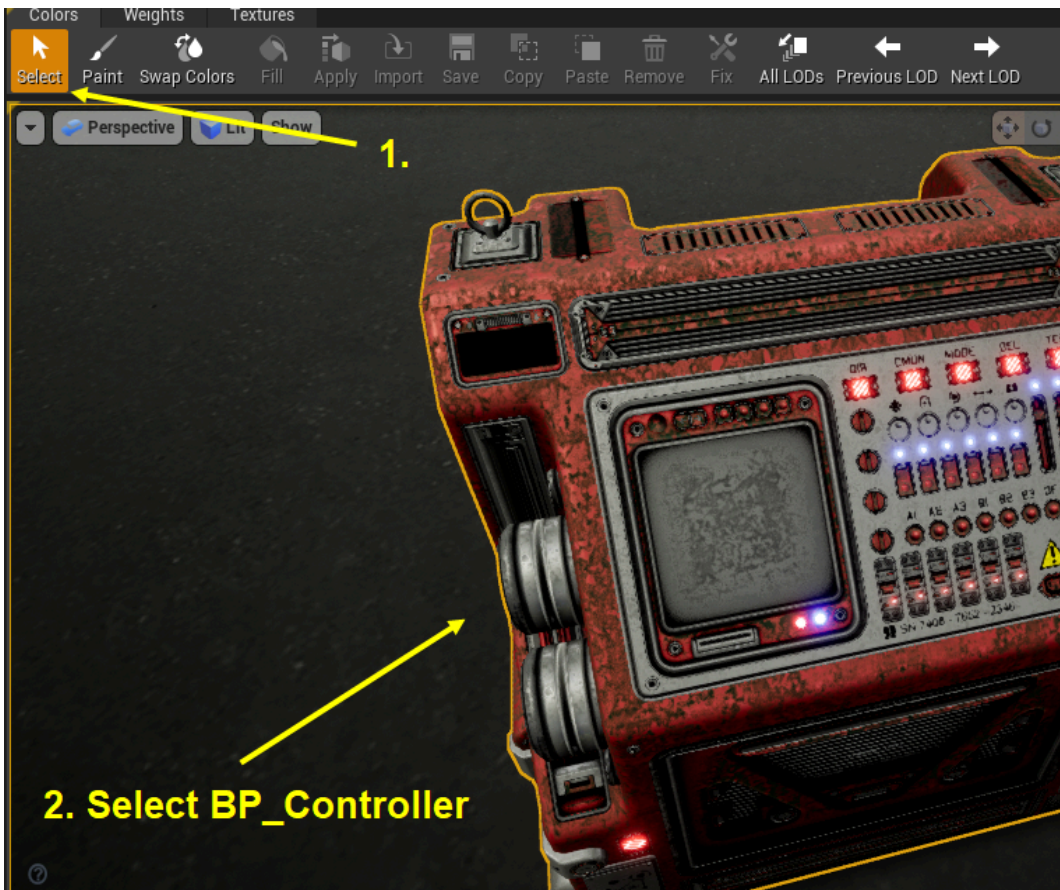
How to use the Vertex paint?

1.

2.

3.

2. Select BP_Controller

4.

1. Select Paint

2. Hold Shift & LMB
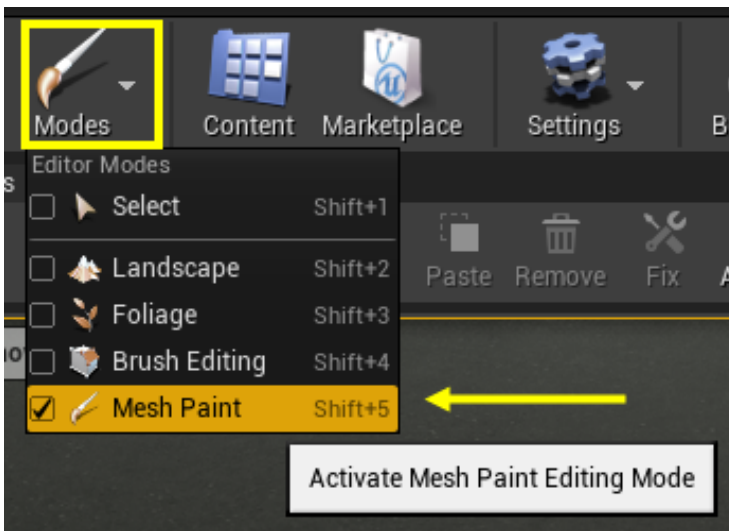
❖ BP_TeslaCoil

- **MeshType (0-9) - change the appearance of BP_TeslaCoil**
  Ability: 7 - fast coil 9 - insane coil

  All behavior settings are stored in the AI (group)
- **Extra Damage - if MeshType = 9**
- **ScanInterval -** how often to scan the area

❖ BP_Platform

AttachActorClass - objects that can be moved by the platform

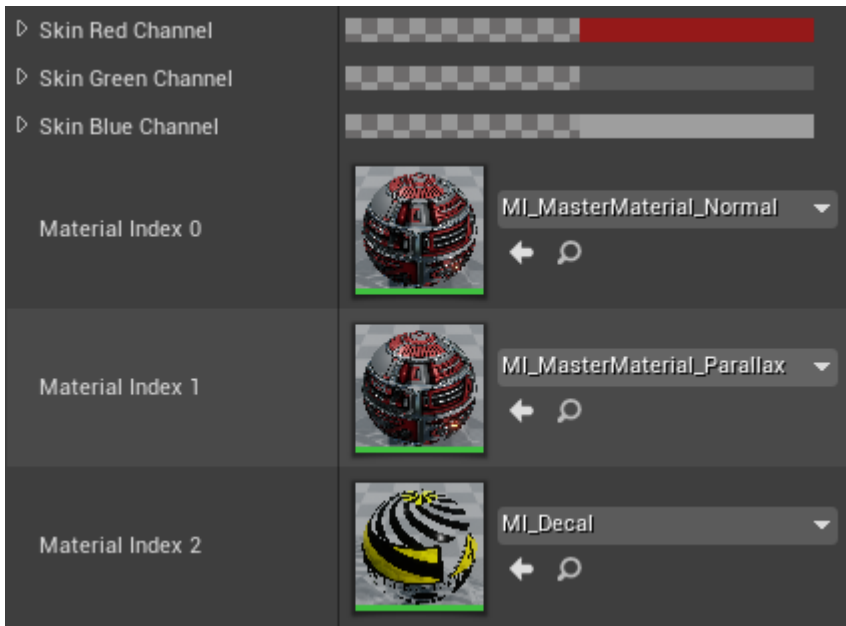**RailMesh -** Static mesh

Platform_Lenght - Length of the rails

IsSmoothMove - Smoothness of the platform movement

Platform_Speed …

Platform_StartLocation - Starting point of the platform

❖ BPC_SkinManager

The component that is needed to change these parameters:

The component changes the parameters in M_MasterMaterial

❖ M_MasterMaterial (Instances)

T_Atlas_ACH (In "Textures" dir):

A - Ambient occlusion (RED Channel) - AO Settings in mastermaterial

C - Curvature Channel (GREEN Channel) - Curvature settings in mastermaterial

H - Height Channel (BLUE Channel) - Parallax Settings in mastermaterial
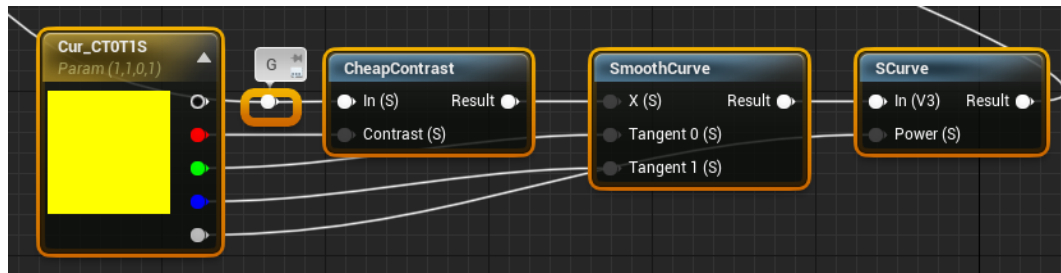
AO (Ambient occlusion) (T_Atlas_**A**CH)

AO_IDInt - (T_Atlas_ID RGB) - Ambient occlusion intensity

AO_PMMM - <u>P</u>ower + <u>M</u>ultiply + Clamp <u>M</u>in + Clamp <u>M</u>ax

Curvature (T_Atlas_A**C**H)

Cur_IDInt - (T_Atlas_ID RGB) - Curvature intensity

Cur_CT0T1S:

Noise_PMMM - <u>P</u>ower + <u>M</u>ultiply + Clamp <u>Mi</u>n + Clamp <u>Ma</u>x

*Parallax (*T_Atlas_AC<u>H</u>*)*

The standard function is used (ParallaxOcclusionMapping)