

SciFi Monowheel Drone Documentation

How to work with a sequencer?

❖ Quick settings:

1. Select SciFi* root folder in Content Browser > RMB > Migrate (Select your project folder)
2. Project Settings > Maps & Modes > Default Game Mode > BP_OmniBike_GameMode
3. If you cannot control the object using the keyboard, then the **DefaultInput.ini** file (or the section DefaultInput.ini > "[/Script/Engine.InputSettings]") is missing in your project folder.

You can download this file from here >>> [DefaultInput.ini](#) - copy this ini file to the project folder with the replacement (for example, MyProject\Config\DefaultInput.ini).

If there is important data in your DefaultInput.ini file, then just copy the data [/Script/Engine.InputSettings] section (you don't need to replace your ini file)

The main parameters affecting drone behavior

IsPower - Turn on/off drone power

Health_DamageStatus - After this health value, the drone will change the material to dirty and turn on the smoke particles

Wheel_Type - Different types of wheel

Head_Type - Antenna \ radar \ spoiler \ nothing

WheelSpeed & WheelShiftSpeed - Visible wheel spinning. The drone speed is not affected by these values

RadarRotationSpeed - Radar rotation speed (If **Head_Type** = 4)

Walk_Speed & Boost_Speed - Normal speed and speed when pressing Shift (boost)

Acceleration - Smoothness of speed between **Walk_Speed** and **Boost_Speed**

Braking Friction Factor - this parameter is responsible for breaking. The higher the value, the better the braking works

Movement_GroundFriction - How good the grip will be on the ground

JumpVelocity - How high the drone can jump (If you press the Spacebar)

Side_MoveRate - The amount of side strafe. (A and D buttons. If you press W + Shift)

Side_Tilt & Side_Tilt_Speed - The magnitude and speed of the drone's tilt. When you press A and D or mouse control

CameraType - Initial camera position 0 - Left, 1 - Center, 2 - Right. In the game, this value is needed to select the camera using the Q and E keys.

Camera_LeftOffset & Camera_RightOffset - Amount of camera deflection on the left and right

CameraZoom_Speed - Zoom speed

CameraZoomIn - The amount of zoom magnification of the camera

CameraZoomOut - Value for camera without zoom

Destroy_Delay - The lifespan of drone debris. When health is equal to zero and the drone falls apart.

PreDestroy_Particle - When health is zero, these particles spawn and the drone falls apart

The values below are needed to quickly change materials in the blueprint. There are examples of materials (e.g. white/black/yellow/dirty material) in the asset. These examples can be specified in these arrays below, so that you don't have to manually change the material for each mesh.

MaterialNames - Slot names if you open any mesh

MaterialArray - Set the material according to the name (**MaterialNames**)

MaterialDirtArray - These materials will be assigned when the drone's health is less than **Health_DamageStatus**

Weapon_Type: (123450 - keys or Mouse Wheel)

0 - NONE

1 Missile Launcher

2 Auto Cannon

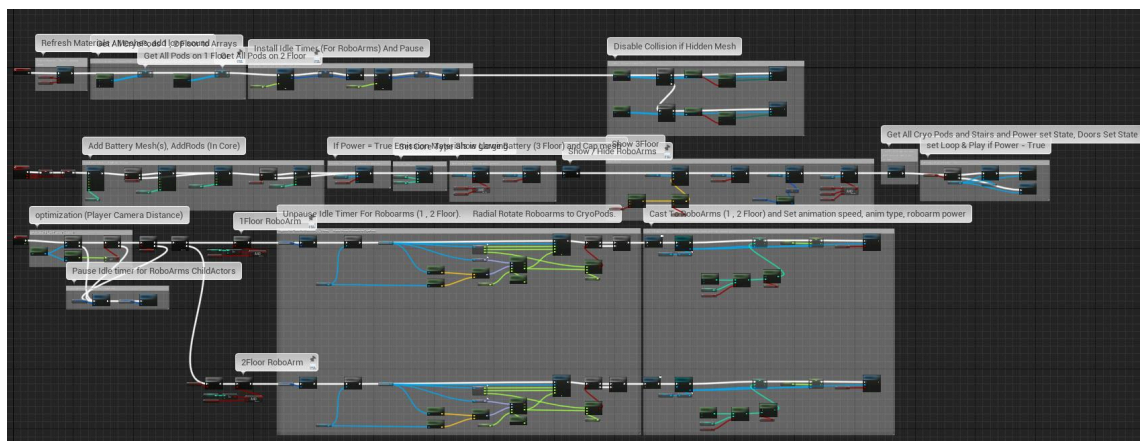
3 Gauss Cannon

4 Laser Cannon

5 Flamethrower

6 Gatling Cannon

Inside each blueprints there are hints.

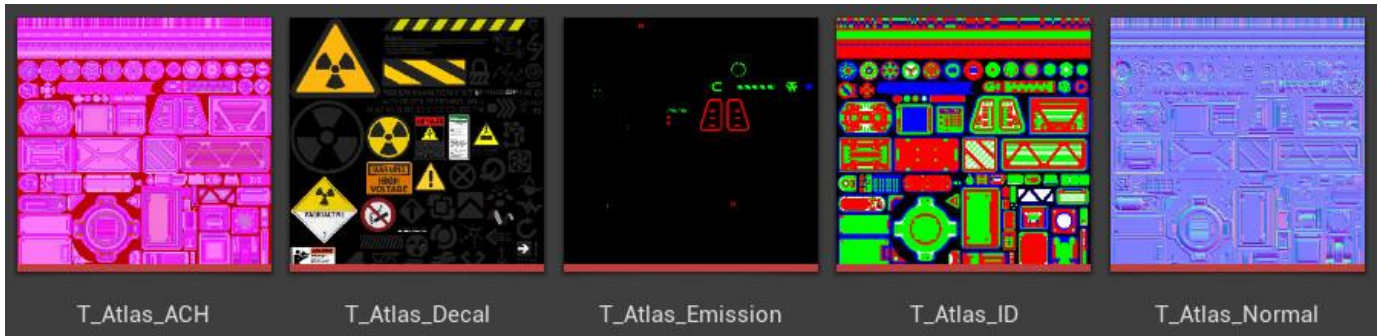


❖ **BPC_SkinManager**

This component manages all materials in the Blueprint. This is necessary for quick material replacement (Manually or with logic. For example dirty material when the player is low on health)

❖ M_MasterMaterial (Instances)

Main Atlases:



T_Atlas_ACH:

A - Ambient occlusion (RED Channel) - AO Settings in master material

C - Curvature Channel (GREEN Channel) - Curvature settings in master material

H - Height Channel (BLUE Channel) - Parallax Settings in master material

AO (Ambient occlusion) (T_Atlas_ACH)

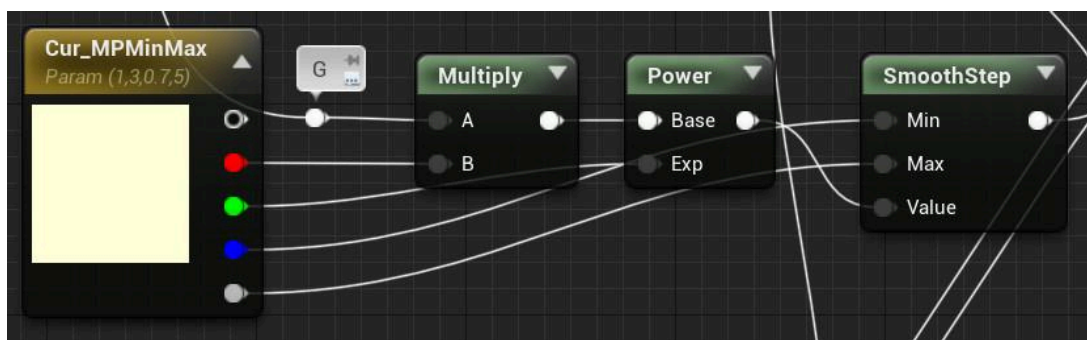
AO_IDInt - (T_Atlas_ID RGB) - Ambient occlusion intensity

AO_PMMM - Power + Multiply + Clamp Min + Clamp Max

Curvature (T_Atlas_ACH)

Cur_IDInt - (T_Atlas_ID RGB) - Curvature intensity

Cur_MPMInMax:



Noise_PMMM - Power + Multiply + Clamp Min + Clamp Max

Parallax (T_Atlas_ACH)

The standard function is used (ParallaxOcclusionMapping)

