Bike Control PRO

The physical implementation of a two -wheeled motorcycle. Sportbike and procedural animation of the character are included in the asset along with control.The maximum stability and stability of the bike on uneven surfaces is realized. Suitable for arcade games.

Features:

1. You can use the Physics substepping.
2. The sound of the motor.
3. The procedural character of the character and inverse kinematics.
4. Burnout.
5. All light bulbs work.
6. The sound of the wheels, the sound of the wheel impact.
7. The sound of the gear switch and the sound of the exhaust.
8. Mobile fluid in expanding barrels.
9. You can configure the bike tilt along the curve from speed.
10. Maximum stability.
11. Braking with an engine.
12. Stoppie Control.
13. Traces from sliding tires.
14. ABS.
15. Dynamic chain.
16. Sportbike includes 28 fully customized material.
17. Support analog Joystick for.

And much more…

Features:

1. All code needed to work is written in C++ for best performance. All necessary functions for work can be called from blueprints. Knowledge of C++ is not required.
2. Easy to use and easy to integrate into your project.
3. Free support for our products in discord.

Bike Control PRO - Trailer

Bike Control PRO - Features

Bike Control PRO - Tutorial. Setting up a plugin for a new bike.

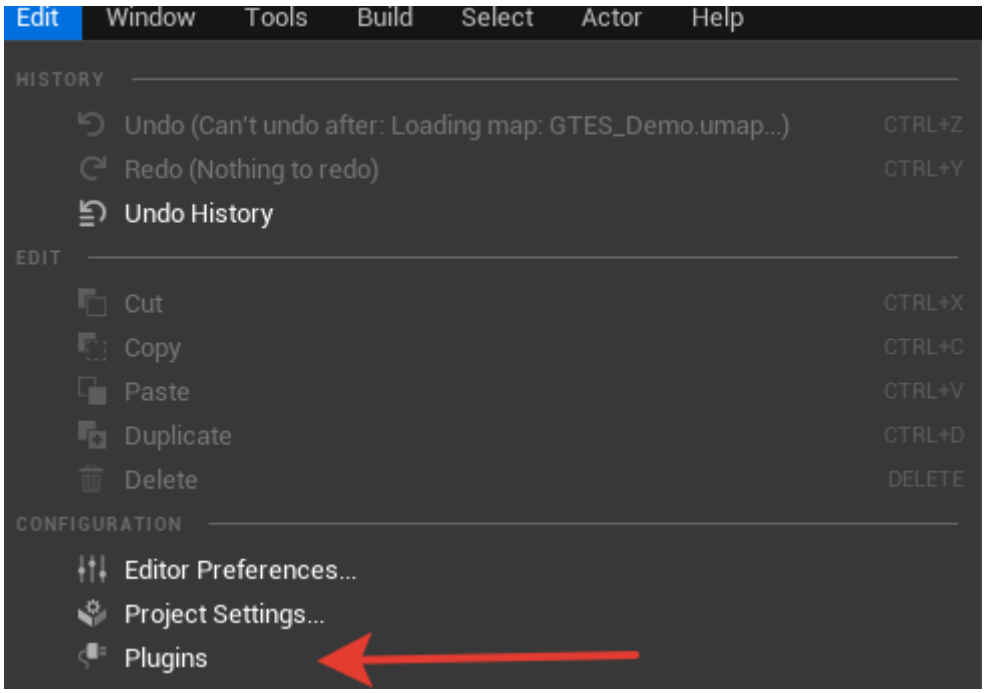
To use a blueprint “BP_SportBikePawn”, you must configure the character control buttons. You can download file DefaultInput.ini and put to **“Your_Project\Config\”**

Disclaimer: For a comfortable calculation of physics, 40+ FPS is required.

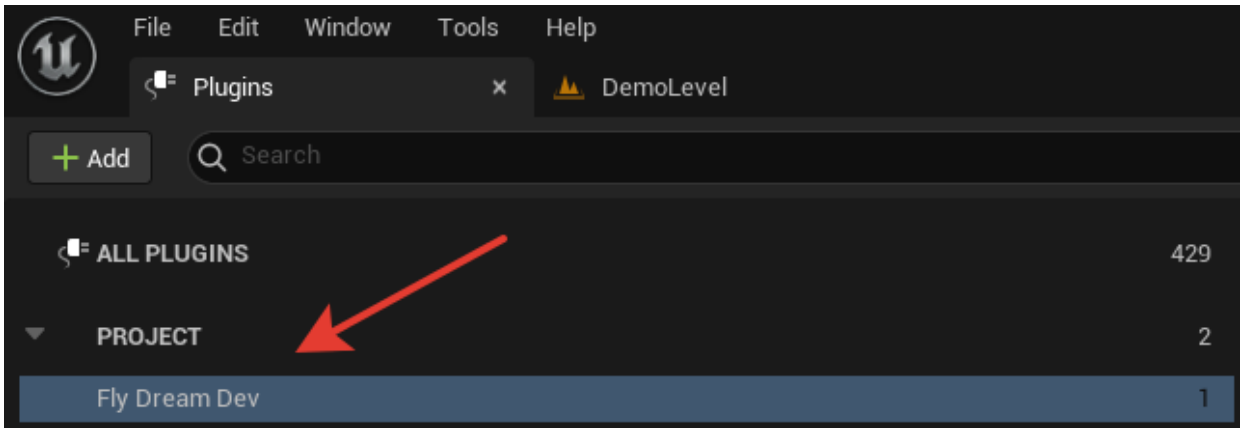
r.MotionBlurQuality 0 - Enter that, the wheels were displayed without blur.

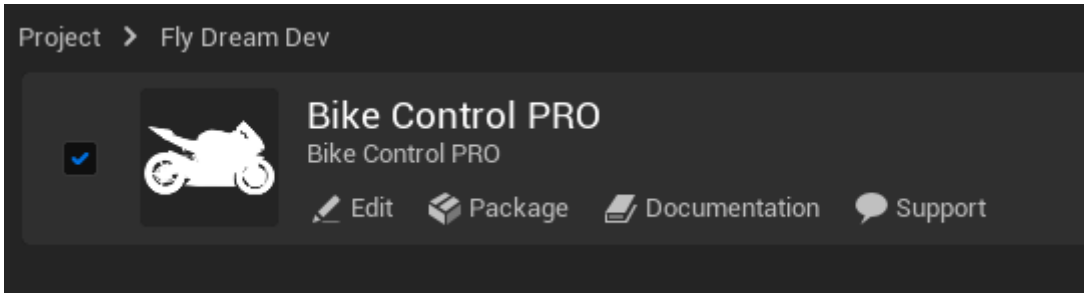
Setup

1. Install plugin from Epic Store Launcher
2. Open your project
3. In the Edit menu, select Plugins.

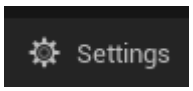


4. Find and enable the Plugin **Bike Control PRO**

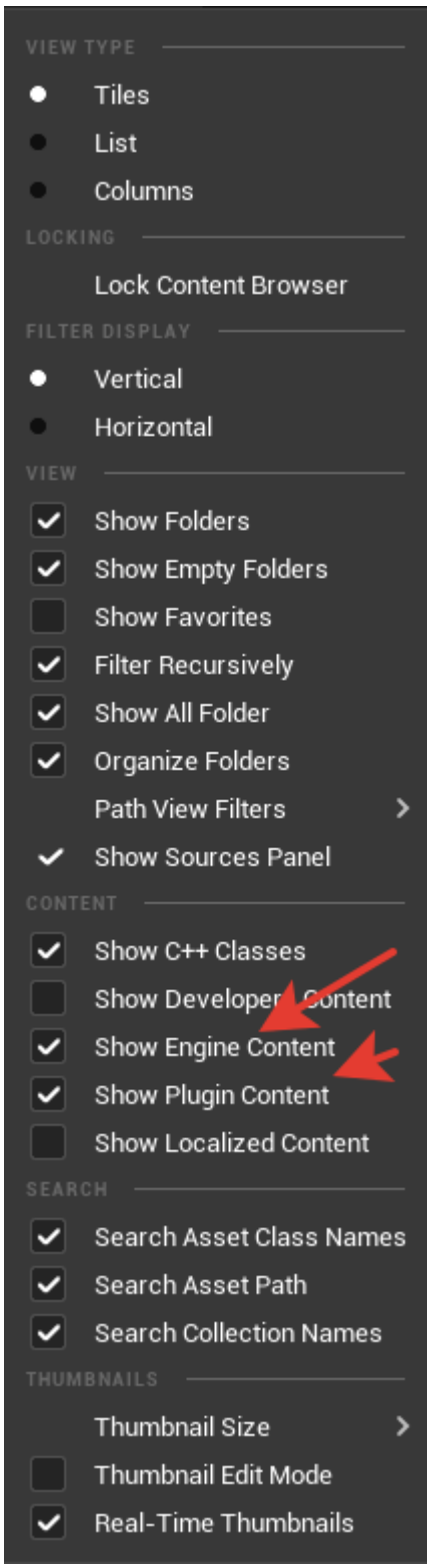




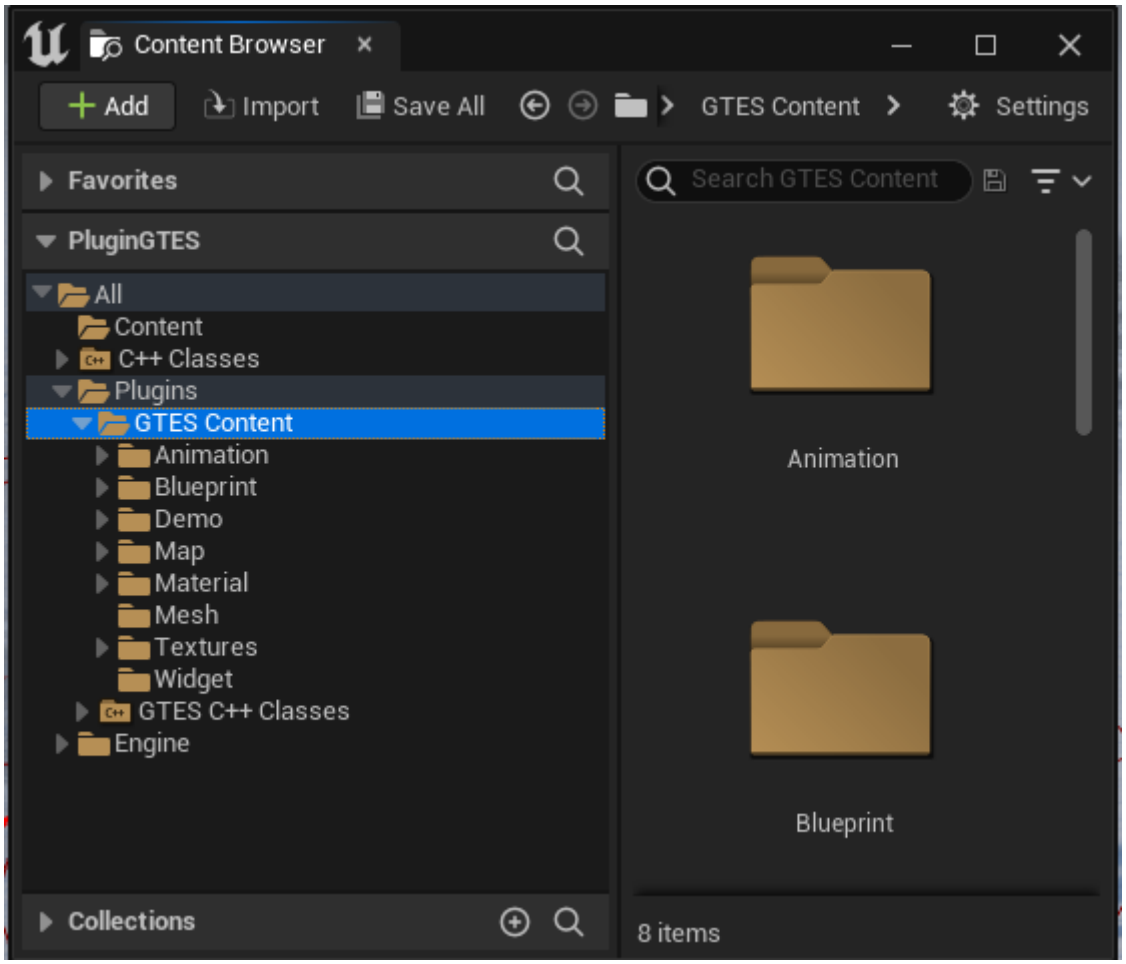
5. Select “Settings”



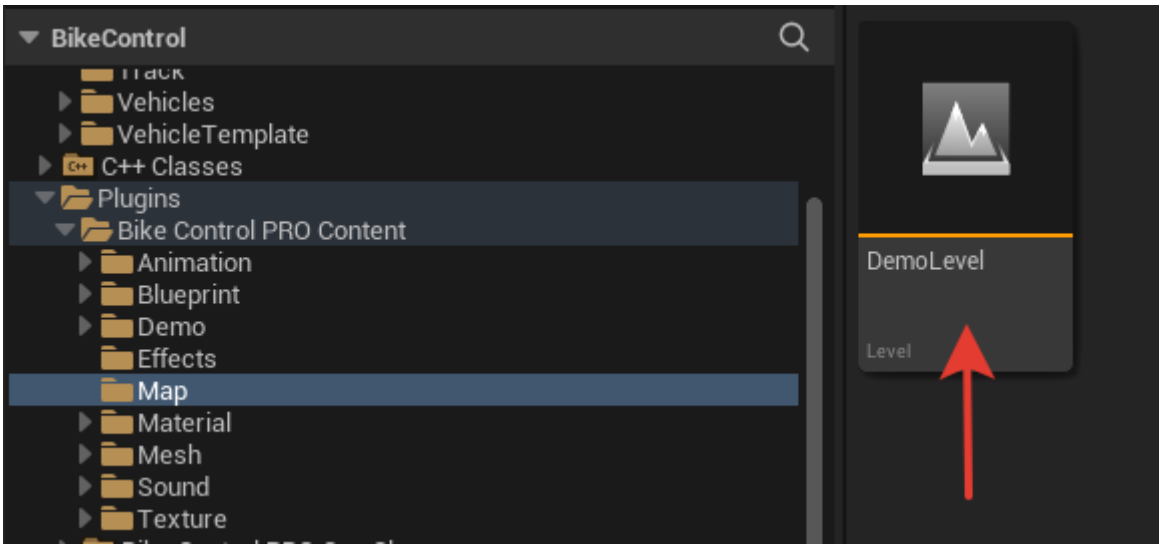
6. Select “Show Plugin Content” and “Show Engine Content”

1. 
VIEW TYPE
Tiles
List
Columns
LOCKING
Lock Content Browser
FILTER DISPLAY
Vertical
Horizontal
VIEW
Show Folders
Show Empty Folders
Show Favorites
Filter Recursively
Show All Folder
Organize Folders
Path View Filters
Show Sources Panel
CONTENT
Show C++ Classes
Show Developer Content
Show Engine Content
Show Plugin Content
Show Localized Content
SEARCH
Search Asset Class Names
Search Asset Path
Search Collection Names
THUMBNAILS
Thumbnail Size
Thumbnail Edit Mode
Real-Time Thumbnails

7. Select “**Bike Control PRO** Content”

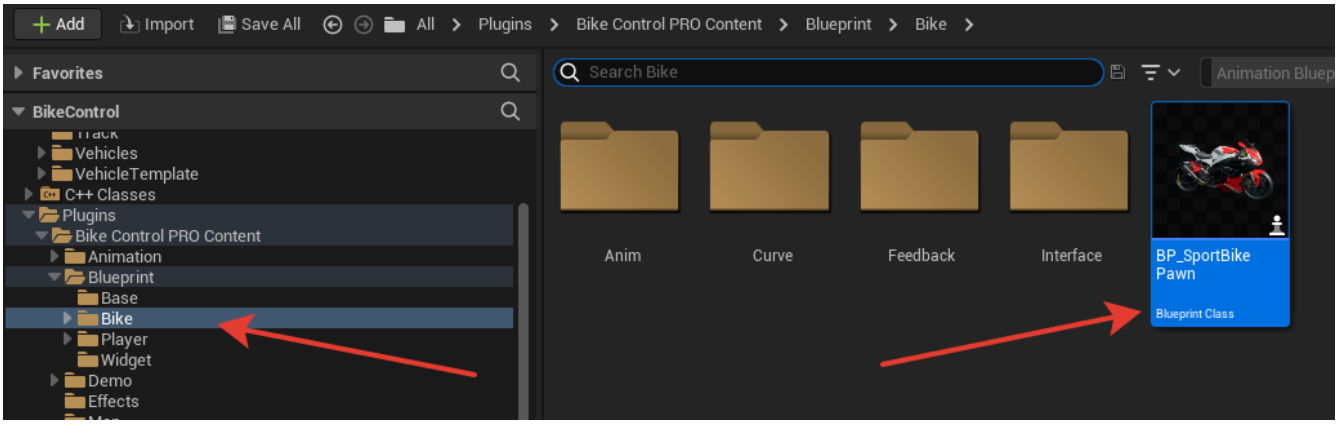


8. Go to “**Bike Control PRO** Content\Map” Open the map “DemoLevel” for examples.

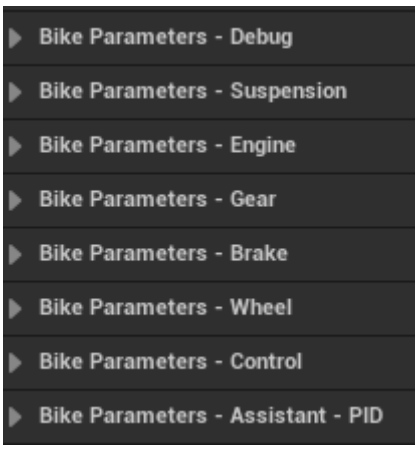


Description of the Bike settings.

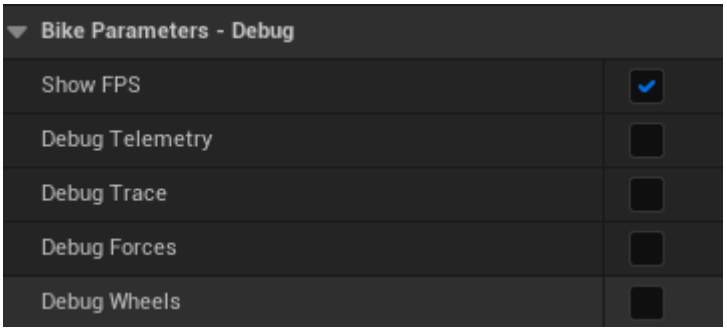
1. Open **BP_SportBikePawn**.



2. To change the settings, use the following categories

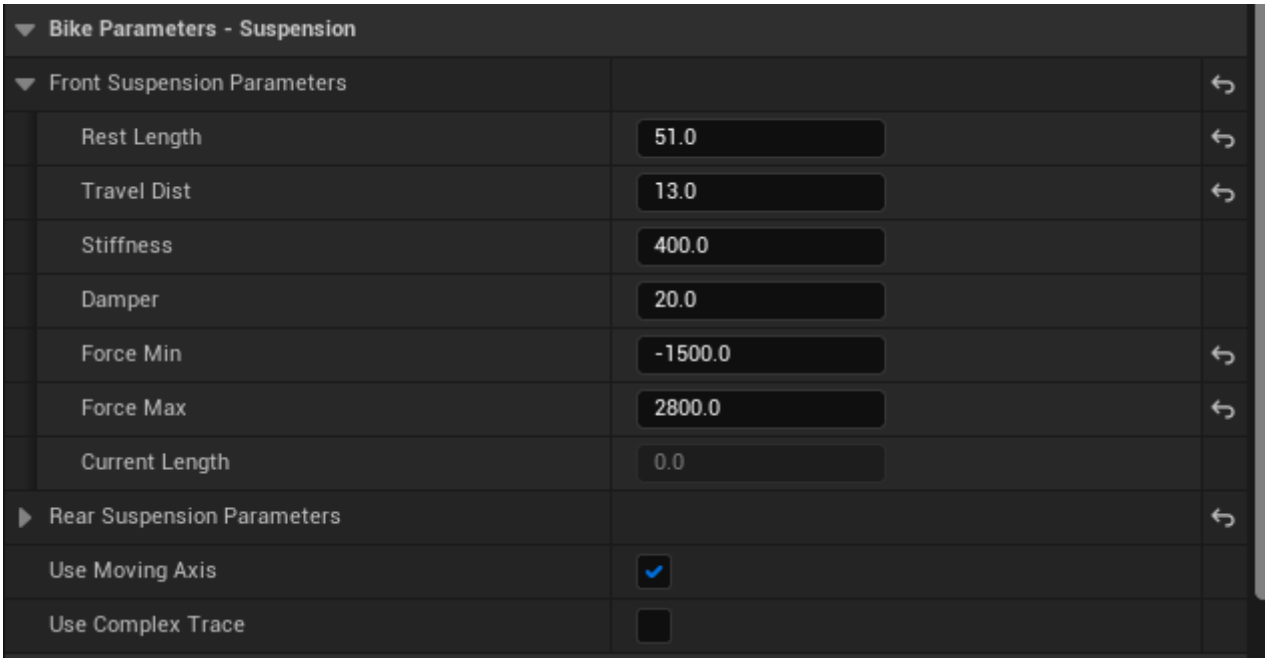


3. **Bike Parameters - Debug.** Used to display service information.



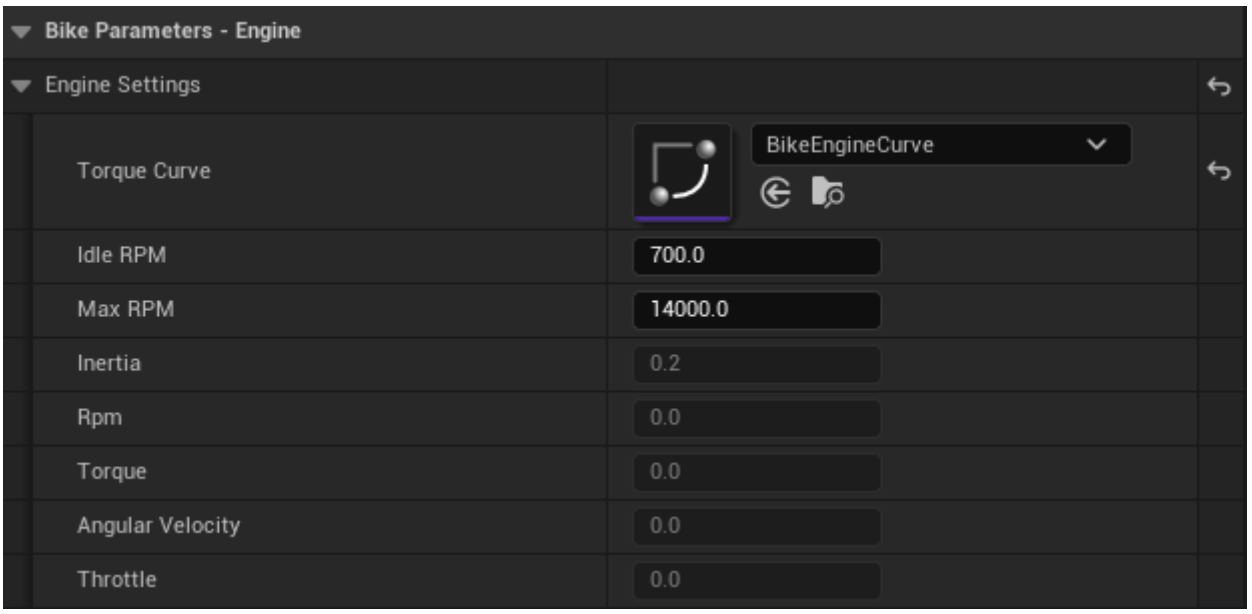
- **Show FPS** - Shows FPS and FPS substepping.
- **Debug Telemetry** - Shows all service and necessary information
- **Debug Trace** - Displays Sphere Trace, can be used for wheel alignment.
- **Debug Force** - Displays the work of different forces affecting the position of the motorcycle in space.
- **Debug Wheels** - Shows the wheels for which the position is being calculated.

4. Bike Parameters - Suspension



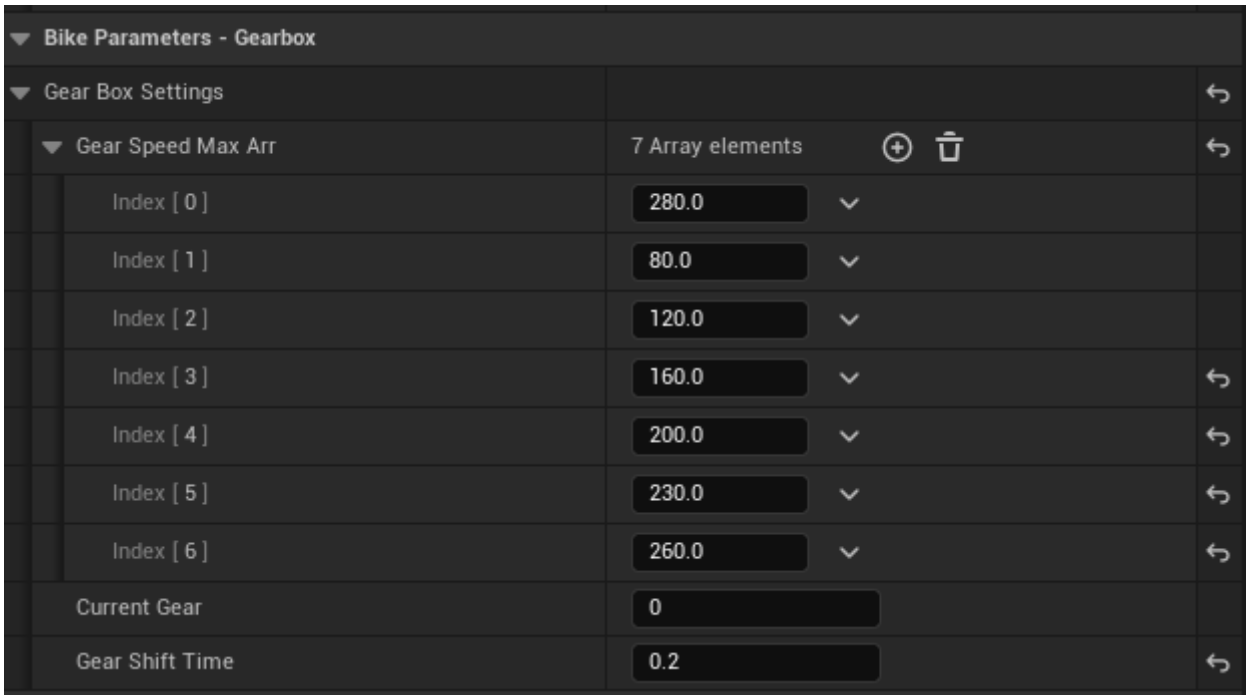
- **Rest Length -** trace length.
- **Travel Dist -** suspension travel distance.
- **Stiffness -** suspension stiffness multiplier.
- **Force Min -** The maximum value of the force that affects the gravity of the wheel to the surface.
- **Force Max -** The maximum value of the force acting on the repulsion of the suspension.
- **Use Moving Axis -** This option takes into account the horizontal. displacement of the wheel. Since the shock absorbers are not perpendicular to the surface.
- **Use Complex Trace -** Complex Trace.

5. Bike Parameters - Engine



- **Torque Curve -** Engine power curve
- **Idle RPM -** Minimum idle engine speed.
- **Max RPM -** Maximum engine speed.

6. **Bike Parameters - Gear**



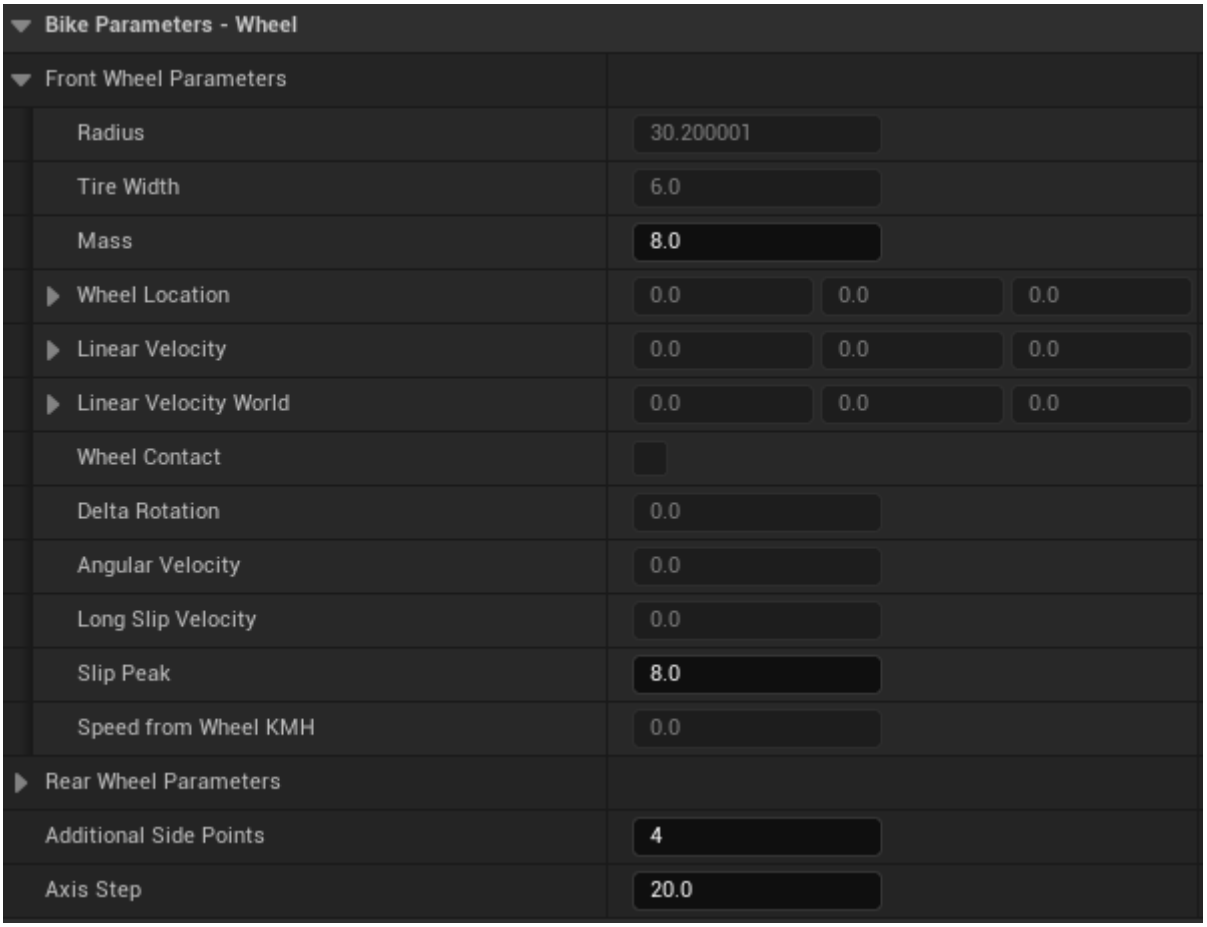
- **GearSpeedMaxArr** - Approximate speed on each gear. Index 0 refers to neutrals.
- **Current Gear** - Starting gear.

- **Gear Shift Time** - Time spent on switching transmission.

7. Bike Parameters - Brake

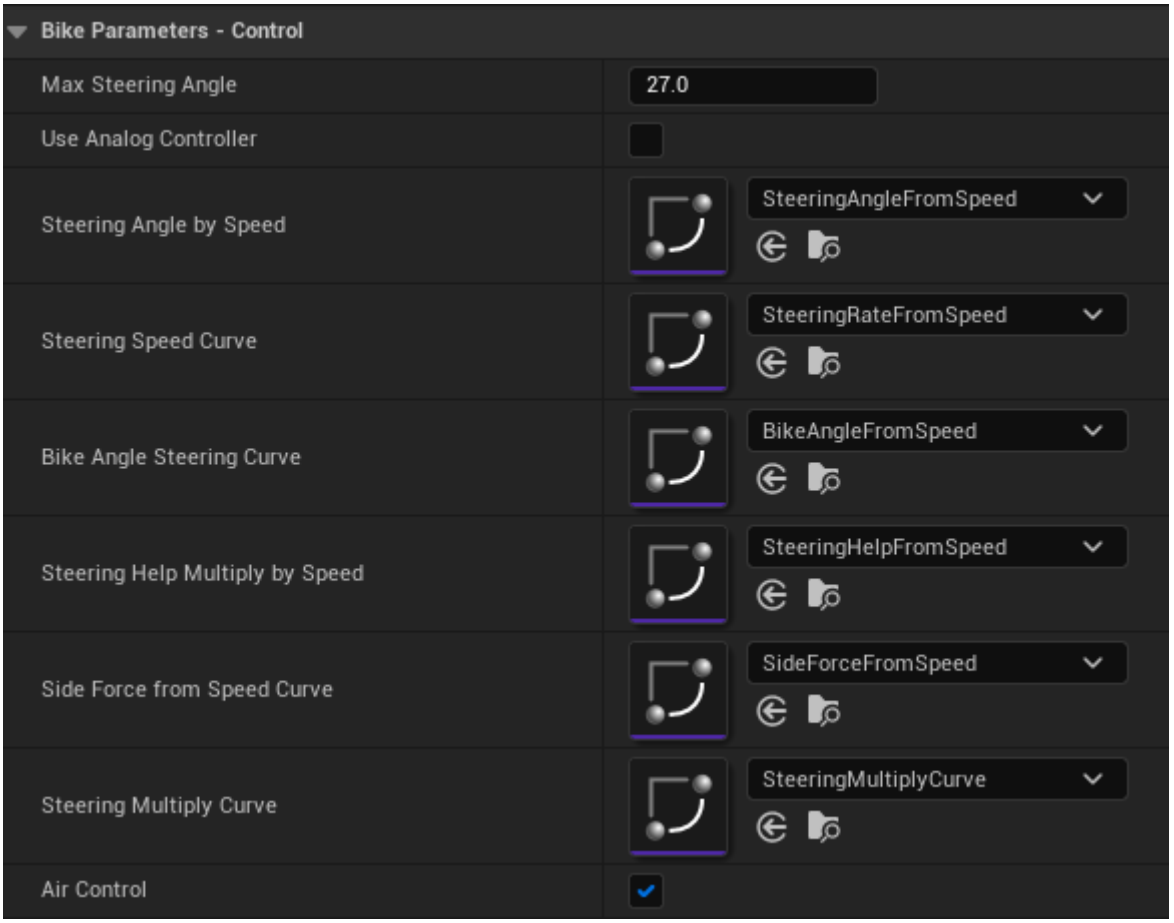
- **Torque Max** - Maximum brake force.
- **Brake Bias** - The maximum brake force on the front wheel is from 0 to 1.
- **Hand Brake Torque** - The force when braking separately by each brake.

8. Bike Parameters - Wheel



- **Mass** - Wheel weight
- **Slip Peak** - Sliding resistance.
- **Additional Side Points** - The number of additional points.
- **Axis Step** - Distance in degrees between points.

9. Bike Parameters - Control



- **Max Steering Angle** - The maximum angle of rotation of the steering wheel.
- **Steering Angle by Speed** - The maximum angle of rotation of the steering wheel over the speed curve.
- **Steering Speed Curve** - The speed of turning the rotation by curve from speed.
- **Bike Angle Steering Curve** - The angle of inclination of the bike along the curve with speed.
- **Steering Help Multiply by Speed** - A multiplier of power to turn the bike along the curve from speed.
- **Side Force from Speed Curve** - The multiplier of the side of the side stabilization of the bike along the curve from speed.
- **Steering Multiply Curve** - The multiplier for the start and end of the rudder turn. This can smooth out the rotation animation so that there is no jitter.

Physics substepping.

- You can enable Physics Substepping if your FPS is below 40 with such settings. Or configure at your discretion.