

# Ushi Arcade Car Physics Free

## Version 1.0.0 documentation

Thank you very much for downloading this time. If you haven't downloaded it yet, it's free, so please do so.

This asset is [Ushi Arcade Car Physics](#) This is a free sample. Basically, no new features will be added. If you like it, please [Ushi Arcade Car Physics](#) Please purchase.

If you have any questions, please contact us using the contact information below.

- [email](#)
- [discord](#)

Non-Japanese documents are machine translated documents written in Japanese. Therefore, there may be some unnatural expressions here and there, so please forgive me.

Click here for script reference.

This is Japanese only. We apologize for the inconvenience, but please use your browser's translation function to translate this page.

---

## car

### How to set up

- Create an empty game object. From now on, we will refer to this game object as Car.
- Attach a Rigidbody to the Car.
- Set the mass of Rigidbody. Although this asset has arcade behavior, it is basically a simulation based on reality, so it is necessary to set a realistic weight.
- Attach SimpleCarController to Car.
- Attach PlayerCarControl to Car.
- Place the 3D model of the car under Car.
- Attach a box collider to the 3D model car body. Of course, you can use a mesh collider, but in that case, don't forget to check convex.
- Duplicate the 3D model tire under Car.
- all from the cloned tire.componentPeel off.
- Attach a Wheel to the duplicated tire.
- Using the gizmo as a reference, adjust the Wheel's Radius to match the 3D model of the tire.
- Set the 3D model corresponding to the Wheel Model.

- Set steerable wheels in SteerableWheels of SimpleCarController. In most cases it will be the front wheel.

## tuning

We have compiled a list of frequently asked questions. If reading these doesn't help, please read the scripting reference. If that doesn't help, please ask.

### I want to increase the turning speed

Increase Max Turn Speed in Simple Car Controller. The unit is deg/s.

### I want to increase the maximum speed

To increase the maximum forward speed, increase the Max Forward Speed KPH in Simple Car Controller.

To increase the maximum reverse speed, increase the Max Backward Speed KPH in Simple Car Controller.

All units are km/h.

### I want to improve acceleration

Increase Max Motor Torque in Simple Car Controller. The unit is Nm.

### I want to improve my grip

Increase Mu of Simple Car Controller.

If you want to increase steering responsiveness, reduce Peak Friction Slip Angle in Simple Car Controller. The unit is deg.

### I want to fix it from rolling over right away.

Move Add Force Offset of Simple Car Controller closer to 0.

### I want to make the suspension harder/softer.

Increase the Suspension Natural Frequency in Simple Car Controller if you want it to be firmer, or decrease it if you want it to be softer. The unit is Hz.

### I want to limit the amount of steering input

Check Steer Limit By Friction in Player Car Control.

---

## camera

- Attach ChaseCamera to the game object to which the main camera is attached.
- Set the car to ChaseCamera's TargetCar.
- If the camera shakes, change the car's Rigidbody Interpolate to Interpolate.