Supercar 2.0 Land Vehicle Scripting System

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Supercar 2.0 Land Vehicle Scripting System

Overview

- Open source
- Versatile - supports many creative options
- Low-impact (low lag)
- Installation simplicity
- Ease of updates
- Compatibility across grids and physics engines

Supercar 2.0 Land Vehicle Scripting System

Background

- Originally forked from Shin Ingen's project in 2015 by permission to support a wide range of vehicle sizes at Burn2's OS project
- Goals and roadmap established
- Continuous development at Github since 2016

Supercar 2.0 Land Vehicle Scripting System

Versatility and Simplicity

- One script covers the needs of all land vehicles - merges the best features of many car scripts
- Configurations stored in notecard
- Script updates only require drop-in replacement - no hand-editing needed to transfer settings
- Wheel movement configured through dialogs - no hand-editing or numerical work needed
- Core script manages vehicle movement and wheel rotations

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Low Impact

- Thinned to most needed features, with add-on scripts for special applications
- Code optimizations
- Child prims set to physics type None while driving, then restored to original physics types when driver stands (a reserved prim name can override this)
- Add-on scripts control single function across all prims (passenger sits, headlights, etc.)
- Tested regularly at events with near-full capacity

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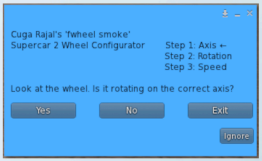
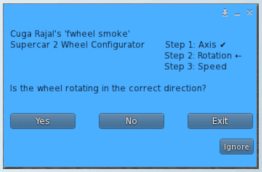
Wheel Configuration Dialogs

1. Drop configuration script in any wheel. Touch wheel to start setup.

2. Script rotates wheel prim along an axis. Dialog asks if wheel is rotating on correct axis based on visual feedback. If not, script changes axis and dialog repeats until correct axis observed.

3. Dialog asks if wheel is rotating correct direction. If not, the direction reverses and dialog repeats.

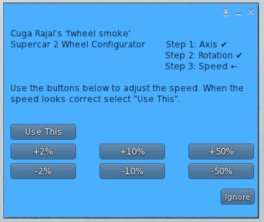


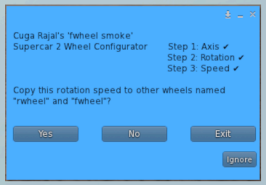


4. Drive car in lowest gear while observing wheel motion. Use dialog buttons to speed/slow rotation until correct rotational speed observed.

5. Option to copy settings to other wheels.

6. Settings are stored in wheel prim description field. Config script self-deletes. Core script reads settings and works immediately. Front wheels turn L/R without further setup.





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Creative Options in Configuration

- Custom gear speeds, turning radius, sounds
- Auto-park
- Camera customization
- Driver messaging
- Bus mode
- Compatibility mode for avSitter and other sit systems

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Add-On Scripts

- Racecar features (screech and smoke)
- Speedometer HUD with button controls
- Single script to manage all headlights and brake lights
- Single script to manage all passenger sits/dances/etc.
- Driver animation switching with vehicle movement controls
- Boarding ramp rezzer
- Door open/close
- Many more

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API For User Customizations

- Link messages provide option to create customizable actions on sit / drive / forward / reverse / gear / stop / stand
- Fully documented in the provided NCs and at Github
- Examples
  - Belts and tank treds - texture animation switching
  - Engine fan rotation

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Demo and Availability

- Full collection of scripts and documentation at GitHub
  https://github.com/cuga-rajal/supercar_plus
- In-world installer packages at OSCC Presenter Booth #6,
  hop://cc.opensimulator.org:8002/OSCC Expo Zone 3/109/53/26

  at the OSCC Sandbox Demo,
  hop://cc.opensimulator.org:8002/OSCC Sandbox/191/236/22

  and at Deep Playa grid
  hop://rajal.org:9000/Playa/350/256/26
- Test-drive a wide range of vehicles at Deep Playa
- Periodic in-world workshops