JaminBen007

Variable data source
Interpolation: Checked
Max step: 1000

RPM

Sound source - looping
Type: Car engine
Static: Checked

Value

Two input operator
Operation: Multiply
Operand 2: 50000

Operand 2

Two input operator
Operation: Add
Operand 1: 300000

Operand 1

The generic filter and the state events ensure that the brake always overrides the gas, in case both are pressed simultaneously

Controller - Brake

On press

On release

State event
Type: Off

State event
Type: On

Game Variable Data Source
Type: Gas value

Interval trigger
Start: 0
Interval: 1 tick

Game Variable Data Source
Type: Brake value

Controller - Gas

Operand 1

Operand 1

On press

On release

Two input operator
Operation: Multiply
Operand 2: 100

Generic filter
Greater than
Operand 2: 0

Operand 1

Two input operator
Operation: Multiply
Operand 2: 200

i

Set value event
Type: Set
Value: 1000

Set value event
Type: Set
Value: 0

Set value event
Type: Set
Value: -100

If you only need the vehicle to brake, set this value to 0. A negative value will try and reverse the vehicle.

Value

On false

On true

Value

Set value event
Type: Set

Set value event
Type: Set

Variable data source

Variable data source
Interpolate: Checked

Angular motor Max force

Angular motor Target velocity

i

Play around with the values in the "Two Input Operators" and the "Set Value Events" to get what's right for your vehicle. Larger, heavier vehicles will need higher values to get them moving, but be careful not to set them too high or the vehicle will lose control

In this diagram, going left to right: the first operator value controls the acceleration, the second operator controls the force at which the vehicle will brake, the value in the first Set value event controls the vehicles top speed, the second Set value event should be 0 or a negative value if reverse is required

Physics joint
Type: Rotational hinge
Preset: Single axis
Properties: Advanced
Angular settings ->
Angular motor: Enabled

Target 1

Target 2

Use the Snap to grid tool in the editor settings to line the pivot point up with the wheels exactly

Pivot point

Glue group

REAR

FRONT

Just for fun...

Controller - Right stick push

Sound event
Type: On

Sound source
Type: Car horn
Static: Checked

Game Variable Data Source
Type: Left stick horizontal value

Operand 1

Two input operator
Operation: Multiply
Operand 2: 7

If the turning circle needs to be changed, adjust this value. A higher number means a tighter turning circle

Value

Interval trigger
Start: 0
Interval: 1 tick

Set value event
Type: Set

Variable data source
Interpolation: Checked

The Left stick horizontal value runs from -3 to 3. The Two input operator increases this value to -21 to 21, giving an arc of 43 degrees (including 0).

In order to match these up correctly, set the min X angle to 0 and line the edge of the pivot point up with the forward direction.

The two yellow boxes in the pivot points should be in the same place for each wheel.

0 degrees

Open up the angular settings in the physics joint to link these values to the variable data source

Lower limit X

Upper limit X

Upper limit X

Lower limit X

Physics joint
Type: Rotational hinge
Preset: Single axis
Properties: Simple

Physics joint
Type: Turning hinge
Preset: Single axis
Properties: Advanced

Physics joint
Type: Turning hinge
Preset: Single axis
Properties: Advanced

Physics joint
Type: Rotational hinge
Preset: Single axis
Properties: Simple

Target 1

Target 2

Target 1

Target 2

Front axle

Front axle

FRONT

REAR