



iRacing ACURA  
ARX-06 GTP  
Buggy



# iRacing ACURA ARX-06 GTP Buggy User Manual

[Home](#) » [iRacing](#) » iRacing ACURA ARX-06 GTP Buggy User Manual 

## Contents

- 1 iRacing ACURA ARX-06 GTP Buggy
- 2 INTRODUCTION
- 3 GETTING STARTED
- 4 LOADING AN iRACING SETUP
- 5 DASH CONFIGURATION
- 6 WHEELSPIN / BRAKE LOCK INDICATOR LIGHTS
- 7 SHIFT LIGHTS
- 8 TIRES & AERO
- 9 CHASSIS
- 10 DAMPERS
- 11 SYSTEMS
- 12 REAR DIFF SPEC
- 13 SETUP TIPS
- 14 CHASSIS HEIGHTS
- 15 Documents / Resources
  - 15.1 References
- 16 Related Posts



**iRacing**<sup>®</sup>

iRacing ACURA ARX-06 GTP Buggy



## ACURA ARX-06 GTP | TECH SPECS

# CHASSIS

**DOUBLE WISHBONE WITH PUSHROD-ACTUATED INBOARD SPRINGS**

LENGTH	WIDTH	WHEELBASE	DRY WEIGHT	WET WEIGHT WITH DRIVER
5100 mm 200.8 in	2000 mm 78.7 in	3148 mm 124 in	1030 kg 2271 lbs	1176 kg 2594 lbs

# POWER UNIT

**TWIN-TURBO V6 WITH BOSCH MCGUINCHY HYBRID SYSTEM**

DISPLACEMENT	RPM LIMIT	TORQUE	POWER
2.4 Liters 146.5 CID	9985 RPM	396 lb-ft 537 Nm	671 bhp 500 kW

## INTRODUCTION

- The information found in this guide is intended to provide a deeper understanding of the chassis setup adjustments available in the garage, so that you may use the garage to tune the chassis setup to your preference.
- Before diving into chassis adjustments, though, it is best to become familiar with the car and track. To that end, we have provided baseline setups for each track commonly raced by these cars. To access the baseline setups, simply open the Garage, click iRacing Setups, and select the appropriate setup for your track of choice.
- If you are driving a track for which a dedicated baseline setup is not included, you may select a setup for a similar track to use as your baseline.
- After you have selected an appropriate setup, get on track and focus on making smooth and consistent laps, identifying the proper racing line and experiencing tire wear and handling trends over a number of laps.
- Once you are confident that you are nearing your driving potential with the included baseline setups, read on to begin tuning the car to your handling preferences.

## GETTING STARTED

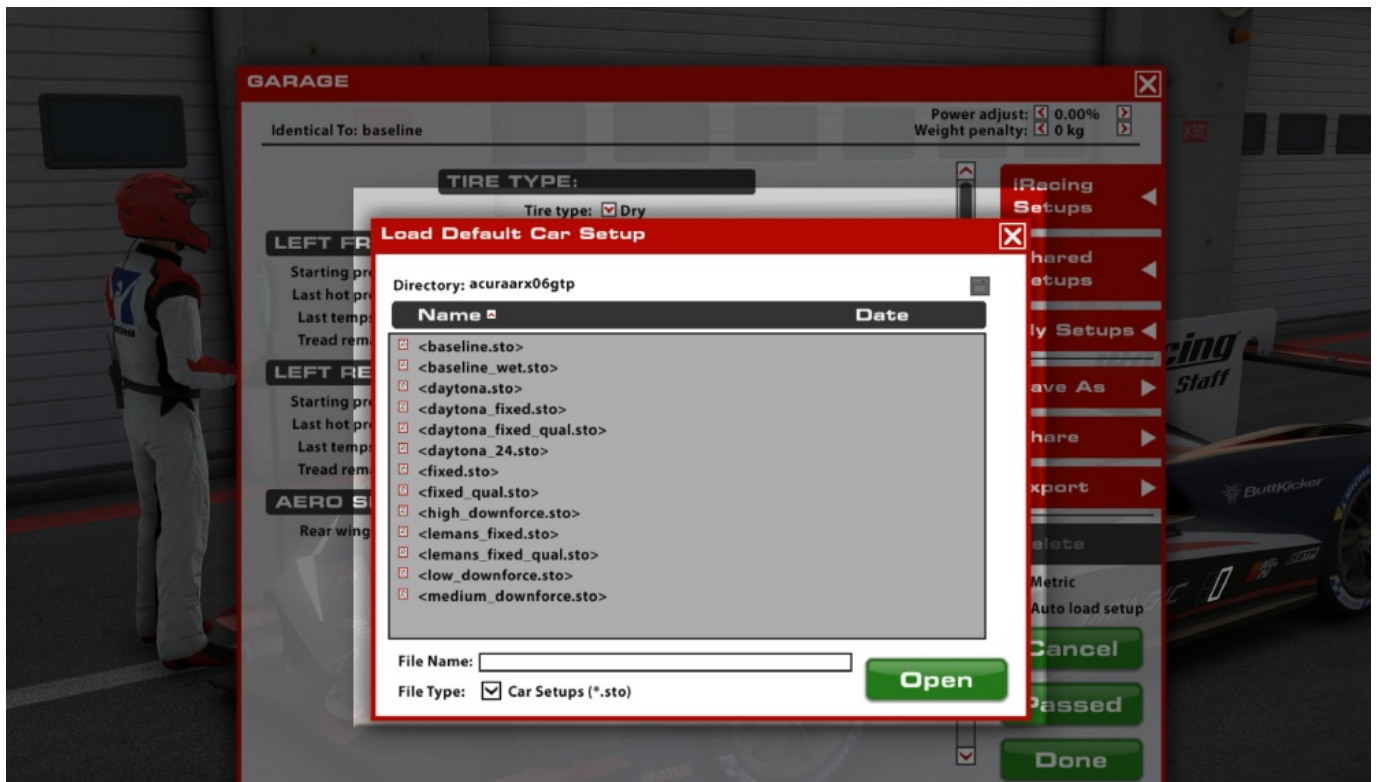


Before starting the car, it is recommended to map controls to adjust the Brake Bias and Traction Control systems. While this is not mandatory to drive the car, this will allow you to make quick changes to the driver aid systems to suit your driving style while out on the track.

Once you load into the car, getting started is as easy as selecting the “upshift” button to put it into gear, and hitting the accelerator pedal. This car uses a sequential transmission and does not require a clutch input to shift up or down. However, the car’s downshift protection will not allow you to downshift if it feels you are traveling too fast for the gear selected and would incur engine damage.

In these situations the downshift command will simply be ignored. Upshifting is recommended when all of the shift lights on the steering wheel have changed to red.

## LOADING AN iRACING SETUP



- Upon loading into a session, the car will automatically load the iRacing Baseline setup [baseline.sto]. If you would prefer one of iRacing's pre-built setups that suit various conditions, you may load it by clicking Garage > iRacing Setups > and then selecting the setup to suit your needs.
- If you would like to customize the setup, simply make the changes in the garage that you would like to update and click apply. If you would like to save your setup for future use click "Save As" on the right to name and save the changes.
- To access all of your personally saved setups, click "My Setups" on the right side of the garage. If you would like to share a setup with another driver or everyone in a session, you can select "Share" on the right side of the garage to do so.
- If a driver is trying to share a setup with you, you will find it under "Shared Setups" on the right side of the garage as well.

## DASH CONFIGURATION

Vital information relating to the car's performance and driver-adjustable settings can all be found on the digital display integrated into the Acura ARX-06's steering wheel.





## WHEELSPIN / BRAKE LOCK INDICATOR LIGHTS

Two sets of LED lights are situated behind the steering wheel on the dash to quickly communicate to the driver if any wheelspin or brake lockup is occurring. The left LED cluster corresponds to the left wheels and the right cluster corresponds to the right wheels.



## Traction Control

When the clusters light up all LEDs in blue the Traction Control system is intervening to reduce wheelspin. Severe cases of wheelspin and TC system activation will produce a solid blue light and the lights will begin flashing for less amounts of TC intervention.



### Brake Lockup

Whenever braking force is sufficient to begin locking a wheel the LEDs will illuminate to show both which wheel is locking and how severe the lockup is. Pink lights indicate front wheel lockup and yellow lights indicate rear wheel lockups, with lockups becoming more severe with more LEDs illuminated. The image above shows both front wheels locked with a slight lockup on the left-rear wheel.



### SHIFT LIGHTS



- The top of the steering wheel has a set of lights to help the driver know when to shift up to the next gear while accelerating. As RPM increases, the lights will illuminate from the left to right starting with green and ending with two red LEDs on the right.
- Once the optimum shift point has been reached all LEDs will change to red and begin flashing.

### PIT LIMITER

- When the pit limiter is active the shift lights (and the status clusters on either side of the shift lights) will change to pink and a “SPEED” indicator will appear at the top right of the steering wheel display. When the pit limiter is enabled and speed is above the pit road speed limit the center lights will be off. As speed decreases to the pit road speed limit the lights will illuminate and converge in the center until all lights are on, signaling the car is traveling at the pit road speed limit. The lights are tuned for 2nd gear RPMs only, running with the pit limiter on in another gear won’t affect the pit road speed limit but will change how many lights are illuminated when the car is running at the pit road speed limit.



## ADVANCED SETUP OPTIONS

This section is aimed toward more advanced users who want to dive deeper into the different aspects of the vehicle’s setup. Making adjustments to the following parameters is not required and can lead to significant changes in the way a vehicle handles. It is recommended that any adjustments are made in an incremental fashion and only singular variables are adjusted before testing changes.

## TIRES & AERO

### TIRE DATA

- **TIRE TYPE**

Selects which type of tire is installed on the car when loaded into the world. Dry, or slick, tires are used for dry racing conditions while Wet tires are intended for raining and wet track conditions.

- **STARTING PRESSURE**

The air pressure in the tires when the car is loaded into the world. Lower pressures will provide more grip but will produce more rolling drag and build temperature faster. Higher pressures will feel slightly more responsive and produce less rolling drag, but will result in less grip. Generally, higher pressures are preferred at tracks where speeds are higher while lower pressures work better at slower tracks where mechanical grip is important.

- **LAST HOT PRESSURE**

When the car returns to the garage after an on-track stint, the tire pressure will be displayed as Hot Pressure. The difference between cold and hot pressure is a good way to see how tires are being loaded and worked while on track. Tires seeing more work will build more pressure, and paying attention to which tires are building more pressure and adjusting cold pressure to compensate can be crucial for optimizing tire performance.

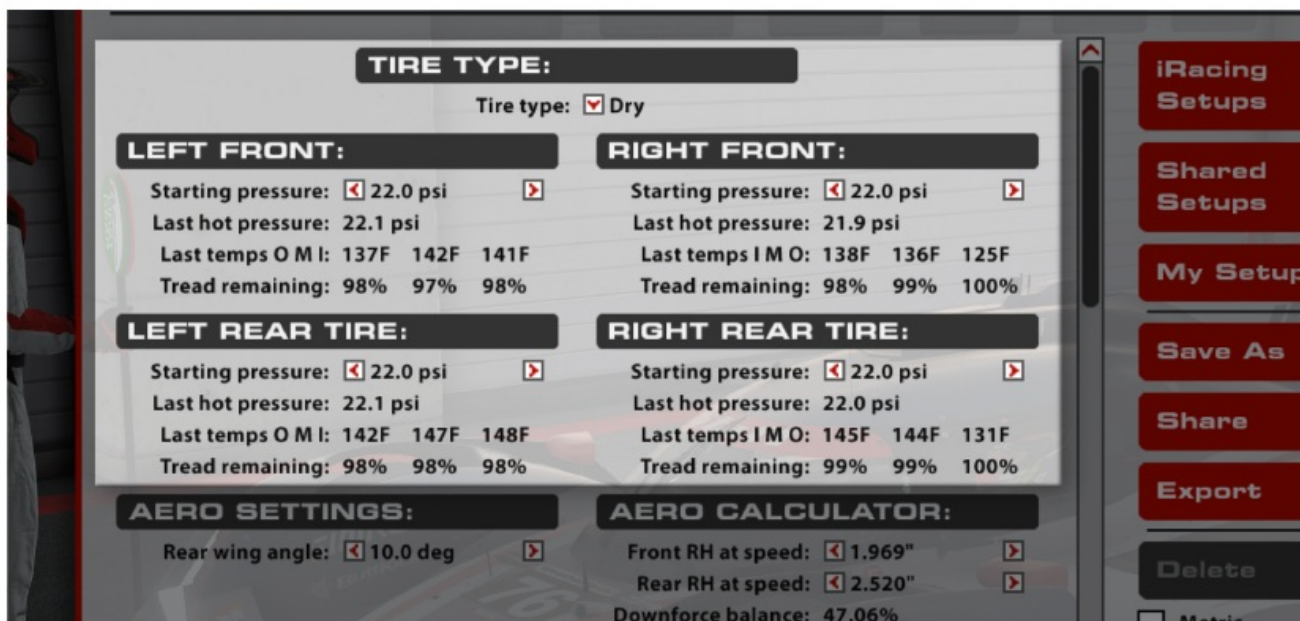
- **LAST TEMPS**

The tire carcass temperatures (measured within the tread) are displayed after the car returns from the track. These temperatures are an effective way to determine how much work or load a given tire is experiencing while on track. Differences between the inner and outer temperatures can be used to tune individual wheel alignment and the center temperatures can be compared to the outer temperatures to help tune tire pressure.

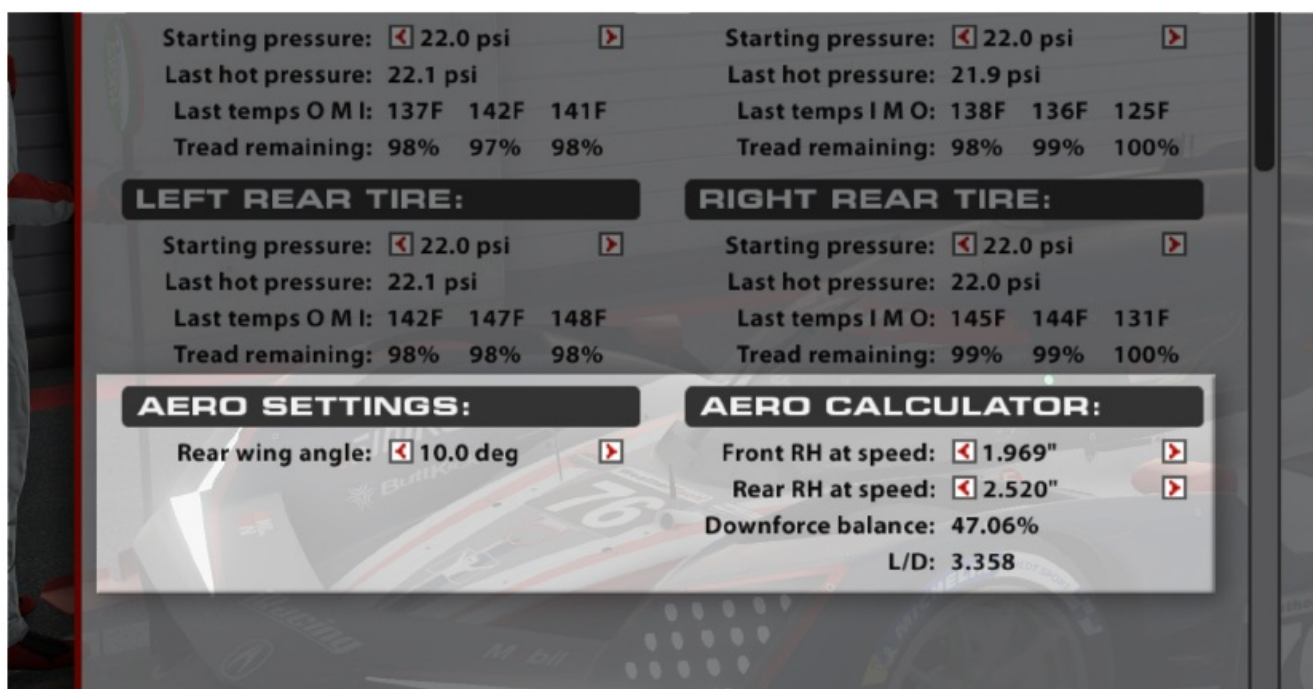


## • TREAD REMAINING

The amount of tread on the tire, displayed as a percentage of a new tire, is shown below the tire temperatures. These values are good for determining how far a set of tires can go before needing to be replaced, but don't necessarily indicate an under- or over-worked tire in the same way temperatures will.



## AERO SETTINGS



## • REAR WING ANGLE

The Rear Wing Angle setting changes the angle of attack of the rear wing. Increasing the angle will increase the amount of downforce produced and move the aero balance rearward but will increase the amount of drag the wing produces. Reducing the angle will reduce overall downforce and shift aero balance forward, but will reduce drag and allow for a higher top speed. This angle is expressed as a reference measurement, not an absolute angle relative to the ground.

## • AERO CALCULATOR

The Aero Calculator is a tool used to display the car's approximate aerodynamic values in a given configuration. Changes to the car's aerodynamic settings will be reflected in the Aero Calculator, giving an idea



of how the car will behave aerodynamically while on the race track. This calculator can also be used to determine what changes need to be made to the car to alleviate aerodynamically-induced handling issues.

- **FRONT/REAR RH AT SPEED**

The Ride Height (RH) at Speed is used to give the Aero Calculator heights to reference for aerodynamic calculations. When using the aero calculator, determine the car's Front and Rear Ride height via telemetry at any point on track and input that value into the "Front RH at Speed" setting.

- **DOWNFORCE BALANCE**

Displayed in percent of Front downforce, this value shows how much of the car's total downforce is over the front axle. A higher percentage value indicates more front downforce, increasing oversteer in mid- to high-speed corners and a lower percentage value indicates more rear downforce, increasing understeer in mid- to high-speed corners.

- **L/D**

The "L/D" value is the ratio of Lift (downforce) to Drag. This quantifies how efficiently the car's bodywork is producing downforce in terms of how much drag is being produced as a result. A higher L/D value means more downforce is being produced for each unit of drag, meaning the bodywork is being more efficient. Having a higher L/D value without sacrificing overall downforce will result in a faster, more efficient car. Optimum values for L/D can vary based on the aerodynamic configuration and track type.

## CHASSIS

### FRONT



- **HEAVE SPRING**

The Heave Spring is a suspension element that handles loads when the chassis moves in a purely vertical direction and does not experience loads generated from chassis roll. The front Heave Spring will influence the chassis' handling balance during braking and over bumps, but is primarily intended to control increasing aerodynamic loads with higher speeds. Stiffer Heave Spring rates will stiffen the suspension in vertical travel and result in a more consistent aerodynamic platform but can reduce mechanical grip over rough surfaces. Softer Heave Springs will increase mechanical grip but could allow too much movement to keep the aerodynamic behavior consistent.

- **HEAVE PERCH OFFSET**

The Heave Perch Offset is a way to preload the Heave Spring element, allowing front ride height changes without inducing any asymmetric loading to the suspension. Decreasing the value will preload the Heave spring and raise the front ride heights, increasing the value will unload the spring and lower the front ride heights.

- **HEAVE SPRING DEFLECTION**

The Heave Spring Deflection is how much the Heave Spring has compressed from its free (unloaded) length. This is not directly adjustable, but is altered as a result of other front suspension adjustments, especially the Heave Perch Offset setting. Higher deflection indicates the spring is under higher pre-load, lower deflection indicates a more relaxed spring.

- **HEAVE DAMPER DEFLECTION**

The Heave Damper Deflection is an indicator of how much travel is available in the Heave element before bottoming out. This value doesn't represent any loading in the suspension, only the Heave Damper's position.

- **PUSHROD LENGTH DELTA**

This adjusts the length of both front suspension pushrods together, shown as an offset from a baseline length figure. This is a great way to adjust front ride height without altering the preload on the Heave Spring.

- **ARB SIZE**

The Anti-Roll Bar (ARB) is a spring device in the front suspension that counteracts roll movement but not vertical loading. Changing the ARB diameter will alter the front suspension's roll stiffness and handling balance: Stiffer ARB settings will increase front roll stiffness and induce understeer, softer ARB settings will reduce stiffness and reduce understeer. Disconnecting the bar will remove the ARB from the suspension entirely and can greatly reduce mechanical understeer, however this reduction in roll stiffness can hurt aerodynamic performance in high-speed corners.

- **ARB BLADES**

The ARB Blades (or arms) can be changed to further tune the suspension roll stiffness beyond only the ARB size setting. This option changes the orientation of the ARB blades and are given numerical values for simplicity, with #1 being the softest option and the blades becoming stiffer as the value is increased to the maximum setting of #5. Based on stiffness the blade option will produce the same result as a similar adjustment to the ARB Size: Stiffer blade settings will increase front roll stiffness and induce understeer while softer blade settings will reduce front roll stiffness and reduce understeer. This setting can be adjusted in the car from the F8 black box using the "FARB" setting.

- **TOE-IN**

Toe is the angle of the wheel, looking from vertical, relative to the chassis centerline. Toe-in is when the front of the wheels are closer to the centerline while Toe-out is when the front of the wheels are farther from the centerline than the rear of the tires. On the front end, Toe will alter how quickly the tires respond to steering inputs and influence how stable the car is in a straight line. Toe-out settings (negative garage value) will increase turn-in response and make the car less stable in a straight line, while Toe-in (positive garage value) will increase straight-line stability while making initial steering response more sluggish.

## CHASSIS

### REAR



- **HEAVE SPRING**

The Heave Spring is a suspension element that handles loads when the chassis moves in a purely vertical direction and does not experience loads generated from chassis roll. The rear Heave Spring will influence the chassis' handling balance during braking and over bumps, but is primarily intended to control increasing aerodynamic loads with higher speeds. Stiffer Heave Spring rates will stiffen the suspension in vertical travel and result in a more consistent aerodynamic platform but can reduce mechanical grip over rough surfaces. Softer Heave Springs will increase mechanical grip but could allow too much movement to keep the aerodynamic behavior consistent.

- **HEAVE PERCH OFFSET**

The Heave Perch Offset is a way to preload the Heave Spring element, allowing rear ride height changes without inducing any asymmetric loading to the suspension. Decreasing the value will preload the Heave spring and raise the rear ride heights, increasing the value will unload the spring and lower the rear ride heights.

- **HEAVE SPRING DEFLECTION**

The Heave Spring Deflection is how much the Heave SpringN has compressed from its free (unloaded) length. This is not directly adjustable, but is altered as a result of other rear suspension adjustments, especially the Heave Perch Offset setting. Higher deflection indicates the spring is under higher pre-load, lower deflection indicates a more relaxed spring.

- **HEAVE DAMPER DEFLECTION**

The Heave Damper Deflection is an indicator of how much travel is available in the Heave element before bottoming out. This value doesn't represent any loading in the suspension, only the Heave Damper's position.

- **PUSHROD LENGTH DELTA**

This adjusts the length of both rear suspension pushrods together, shown as an offset from a baseline length figure. This is a great way to adjust rear ride height without altering the preload on the Heave Spring.

- **ARB SIZE**

The Anti-Roll Bar (ARB) is a spring device in the rear suspension that counteracts roll movement but not vertical loading. Changing the ARB diameter will alter the rear suspension's roll stiffness and handling balance: Stiffer ARB settings will increase rear roll stiffness and induce oversteer, softer ARB settings will reduce stiffness and reduce oversteer. Disconnecting the bar will remove the ARB from the suspension entirely and can greatly reduce mechanical oversteer, however this reduction in roll stiffness can hurt aerodynamic performance in high-speed corners.

- **REAR WING ANGLE**

- The ARB Blades (or arms) can be changed to further tune the suspension roll stiffness beyond only the ARB size setting. This option changes the orientation of the ARB blades and are given numerical values for simplicity, with #1 being the softest option and the blades becoming stiffer as the value is increased to the maximum setting of #5. Based on stiffness the blade option will produce the same result as a similar adjustment to the ARB Size: Stiffer blade settings will increase rear roll stiffness and induce oversteer while softer blade settings will reduce rear roll stiffness and reduce oversteer. This setting can be adjusted in the car from the F8 black box using the "RARB" setting.

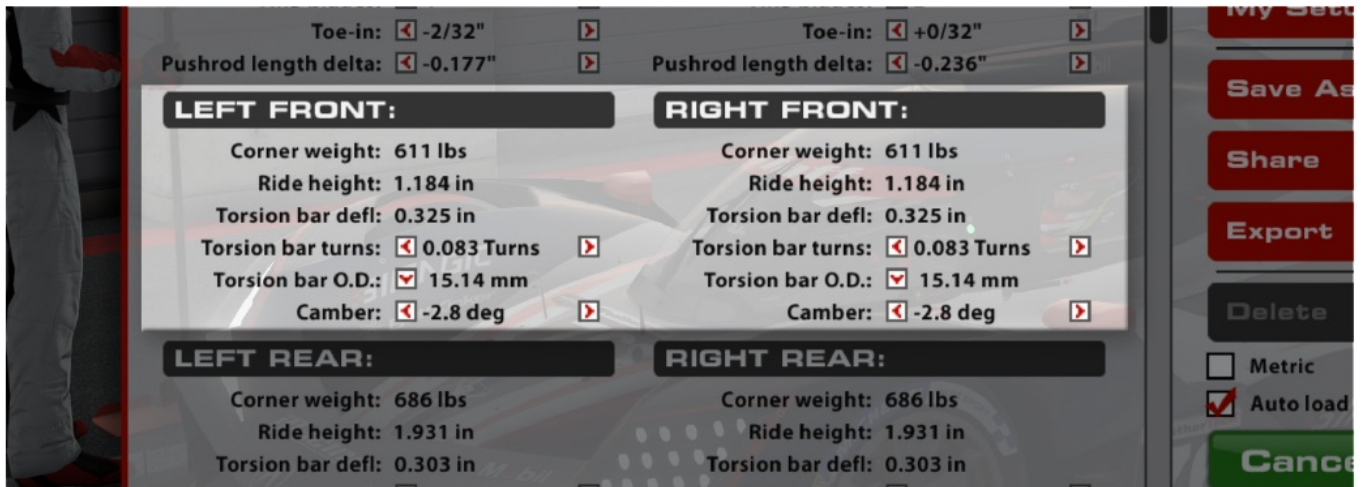
- **TOE-IN**

Toe is the angle of the wheel, looking from vertical, relative to the chassis centerline. Toe-in is when the front of the wheels are closer to the centerline while Toe-out is when the front of the wheels are farther from the centerline than the rear of the tires. On the rear end, Toe will primarily alter how stable the car is in a straight



line and how easily the car will change direction. Toe-out settings (negative garage value) will increase turn-in response and make the car less stable in a straight line, while Toe-in (positive garage value) will increase straight-line stability.

## FRONT CORNERS



- **CORNER WEIGHT**

The weight under each tire while the car is stationary in the garage. Weight placement around the car is crucial to a car's performance and is ultimately what determines how the car handles.

These are not directly adjustable, but will change frequently through the setup process due to changing loads on the suspension. The most effective way to change the values is through the Torsion Bar Turns setting, however all four corner weights will be affected.

- **RIDE HEIGHT**

Front Ride Height is the distance from the ground to the bottom of the chassis plank projected to the front axle. These are reference heights, not necessarily ground clearance values, so values of zero (or even negative) in telemetry may not necessarily indicate the chassis being in contact with the ground.

- **TORSION BAR DEFLECTION**

Torsion Bar Deflection is how far the suspension torsion bars have deflected from their unloaded state. Higher deflection equates to more preload on a given torsion bar, while lower deflections indicate a bar with less preload.

- **TORSION BAR TURNS**

Each torsion bar can be preloaded to raise or lower a given corner of the car and increase or decrease the preload on the torsion bar springs. Increasing the Turn value will preload the torsion bar and raise the corner's ride height, decreasing the Turn value will reduce the preload on a given torsion bar and lower the corner's ride height.

- **TORSION BAR O.D.**

The corner Torsion Bars are the spring elements for each corner of the car and behave in the same way as a conventional coil spring. The Outer Diameter of each torsion bar determines the bar's spring rate and how stiff the bar is through changing suspension loads. Larger diameter bars will have a higher spring rate and will be stiffer, which is great for maintaining a consistent aerodynamic attitude around the track but will reduce mechanical grip, especially in slow corners. Smaller torsion bars will have a lower spring rate and produce more mechanical grip, however the extra movement from the suspension can hurt aerodynamic performance at high speeds.

- **CAMBER**

Camber is the vertical angle of the wheel relative to the center of the chassis. Negative camber is when the top of the wheel is closer to the chassis centerline than the bottom of the wheel, positive camber is when the top of the tire is farther out than the bottom. Due to suspension geometry and corner loads, negative camber is desired on all four wheels. Higher negative camber values will increase the cornering force generated by the tire, but will reduce the amount of longitudinal grip the tire will have under braking. Excessive camber values can produce very high cornering forces but will also significantly reduce tire life, so it is important to find a balance between life and performance.

## REAR CORNERS



### • CORNER WEIGHT

The weight under each tire while the car is stationary in the garage. Weight placement around the car is crucial to a car's performance and is ultimately what determines how the car handles.

These are not directly adjustable, but will change frequently through the setup process due to changing loads on the suspension. The most effective way to change the values is through the Torsion Bar Turns setting, however all four corner weights will be affected.

### • RIDE HEIGHT

Rear Ride Height is the distance from the ground to the bottom of the chassis plank projected to the rear axle. These are reference heights, not necessarily ground clearance values, so values of zero (or even negative) in telemetry may not necessarily indicate the chassis being in contact with the ground.

### • TORSION BAR DEFLECTION

Torsion Bar Deflection is how far the suspension torsion bars have deflected from their unloaded state. Higher deflection equates to more preload on a given torsion bar, while lower deflections indicate a bar with less preload.

### • TORSION BAR TURNS

Each torsion bar can be preloaded to raise or lower a given corner of the car and increase or decrease the preload on the torsion bar springs. Increasing the Turn value will preload the torsion bar and raise the corner's ride height, decreasing the Turn value will reduce the preload on a given torsion bar and lower the corner's ride height.

### • TORSION BAR O.D.

The corner Torsion Bars are the spring elements for each corner of the car and behave in the same way as a conventional coil spring. The Outer Diameter of each torsion bar determines the bar's spring rate and how stiff the bar is through changing suspension loads. Larger diameter bars will have a higher spring rate and will be

stiffer, which is great for maintaining a consistent aerodynamic attitude around the track but will reduce mechanical grip, especially in slow corners. Smaller torsion bars will have a lower spring rate and produce more mechanical grip, however the extra movement from the suspension can hurt aerodynamic performance at high speeds.

## • CAMBER

Camber is the vertical angle of the wheel relative to the center of the chassis. Negative camber is when the top of the wheel is closer to the chassis centerline than the bottom of the wheel, positive camber is when the top of the tire is farther out than the bottom. Due to suspension geometry and corner loads, negative camber is desired on all four wheels. Higher negative camber values will increase the cornering force generated by the tire, but will reduce the amount of longitudinal grip the tire will have under braking. Excessive camber values can produce very high cornering forces but will also significantly reduce tire life, so it is important to find a balance between life and performance.

## DAMPERS

### HEAVE DAMPERS



## • LS COMPRESSION DAMPING

Low-Speed Compression affects how resistant the shock is to compression (reduction in length) when the shock is moving at relatively low speeds, usually in chassis movements as a result of driver input (steering, braking, & throttle) and cornering forces. Higher values will increase compression resistance and transfer load onto a given tire under these low-speed conditions more quickly, inducing understeer on throttle application. For shocks on the front end, increasing Low-Speed Compression can induce understeer under braking and at turn-in, reducing it will reduce understeer. Increasing Low-Speed Compression on the rear of the car will increase traction on initial throttle application, while reducing it can reduce on-throttle understeer.

## • HS COMPRESSION DAMPING

High-Speed Compression affects the shock's behavior in high-speed travel, usually attributed to curb strikes and bumps in the track's surface. Higher compression values will cause the suspension to be stiffer in these situations, while lower values will allow the suspension to absorb these bumps better but may hurt the aerodynamic platform around the track.

## • HS COMPRESSION DAMPING SLOPE

The High-Speed Compression Damping Slope setting controls the overall shape of the high-speed compression side of the shock. Lower slope values produce a flatter, more digressive curve while higher values result in a more linear and aggressive compression graph. The value of the slope setting is very important in controlling bump absorption at high shock velocities and controlling the aerodynamic platform. A lower slope will be helpful for rougher tracks in absorbing bumps and sharp impacts such as curbs, while a higher slope will



keep the suspension more rigid, which can be helpful in resisting compression and raising the chassis above a bump in the track surface. It's important to understand that these settings will affect the range the High-Speed Compression will have, with higher slope values producing a higher overall force for high-speed compression.

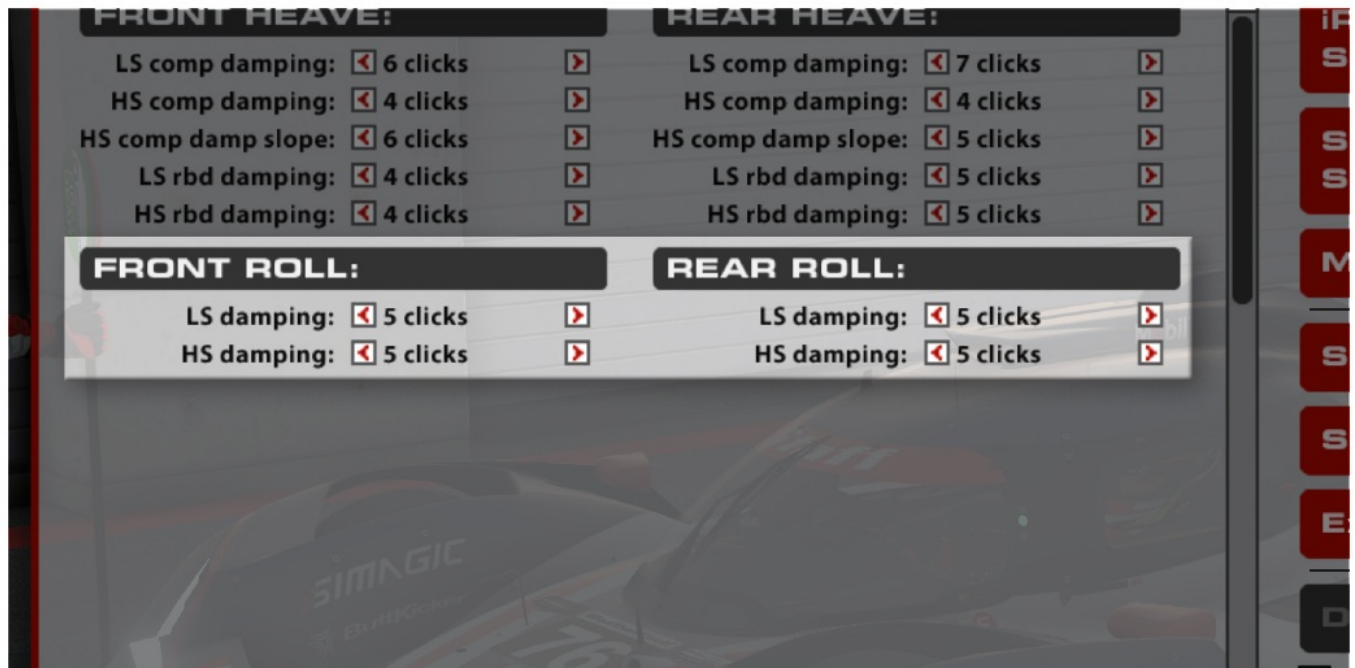
- **LS REBOUND DAMPING**

Low-speed Rebound damping controls the stiffness of the shock while extending at lower speeds, typically during body movement as a result of driver inputs. Higher rebound values will resist expansion of the shock, lower values will allow the shock to extend faster. Higher rebound values can better control aerodynamic attitude but can result in the wheel being unloaded when the suspension can't expand enough to maintain proper contact with the track. On the front of the car, higher Low-Speed Rebound can induce understeer on throttle application while higher settings on the rear of the car can induce understeer under braking.

- **HS REBOUND DAMPING**

High-speed rebound adjusts the shock in extension over bumps and curb strikes. Higher values will reduce how quickly the shock will expand, while lower values will allow the shock to extend more easily. Despite not having as much of an effect on handling in result to driver inputs, High-speed rebound can produce similar results in terms of aerodynamic control and uncontrolled oscillations if set improperly.

## ROLL DAMPERS



### LS DAMPING

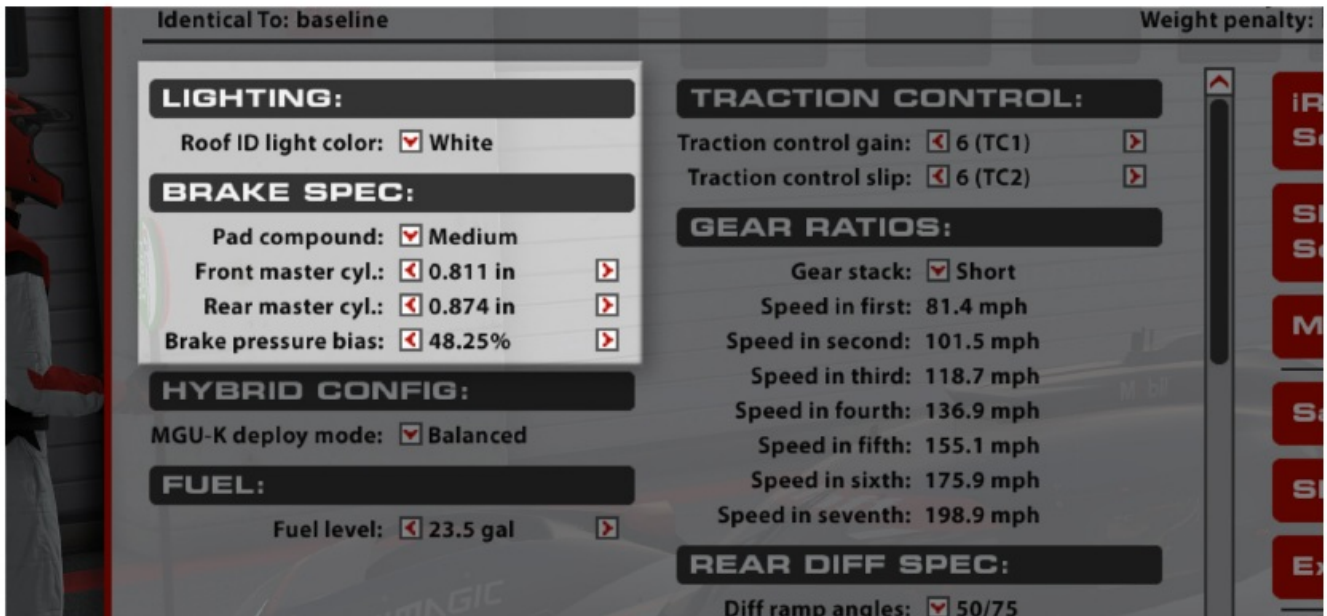
The Low-Speed damping setting on the Roll Dampers will alter how resistant the damper is to both compression and expansion during roll. Higher values will produce a stiffer shock with chassis roll, which can load the outer tire in a corner more quickly, and lower values will soften the shock and delay load to the outer tire. Due to the Roll Damper's operation, rolling the chassis will result in the damper compressing for one direction and rebounding for the other direction, thus both compression and rebound are adjusted equally together.

### HS DAMPING

The High-Speed damping setting will alter how stiff the front Roll Damper is at higher velocities, such as one-wheel curb strikes or side-to-side oscillations. As with the Low-Speed setting, the compression and rebound values are linked as one.

## SYSTEMS

### LIGHTING & BRAKE SPEC



- **ROOF ID LIGHT COLOR**

The color of the identifier lights on the roof of the car can be changed to better identify similarly-painted cars in nighttime conditions. This adjustment has no effect on vehicle performance.

- **PAD COMPOUND**

The vehicle's braking performance can be altered via the Brake Pad Compound. The "Low" setting provides the least friction, reducing the effectiveness of the brakes but allowing for better brake pressure modulation, while "Medium" and "High" provide more friction and increase the effectiveness of the brakes while increasing the risk of a brake lockup.

- **FRONT MASTER CYLINDER**

The Front Brake Master Cylinder size can be changed to alter the line pressure to the front brake calipers. A larger master cylinder will reduce the line pressure to the front brakes, which will shift the brake bias rearwards and increase the pedal effort required to lock the front wheels. A smaller master cylinder will increase brake line pressure to the front brakes, shifting brake bias forward and reducing required pedal effort to lock the front wheels.

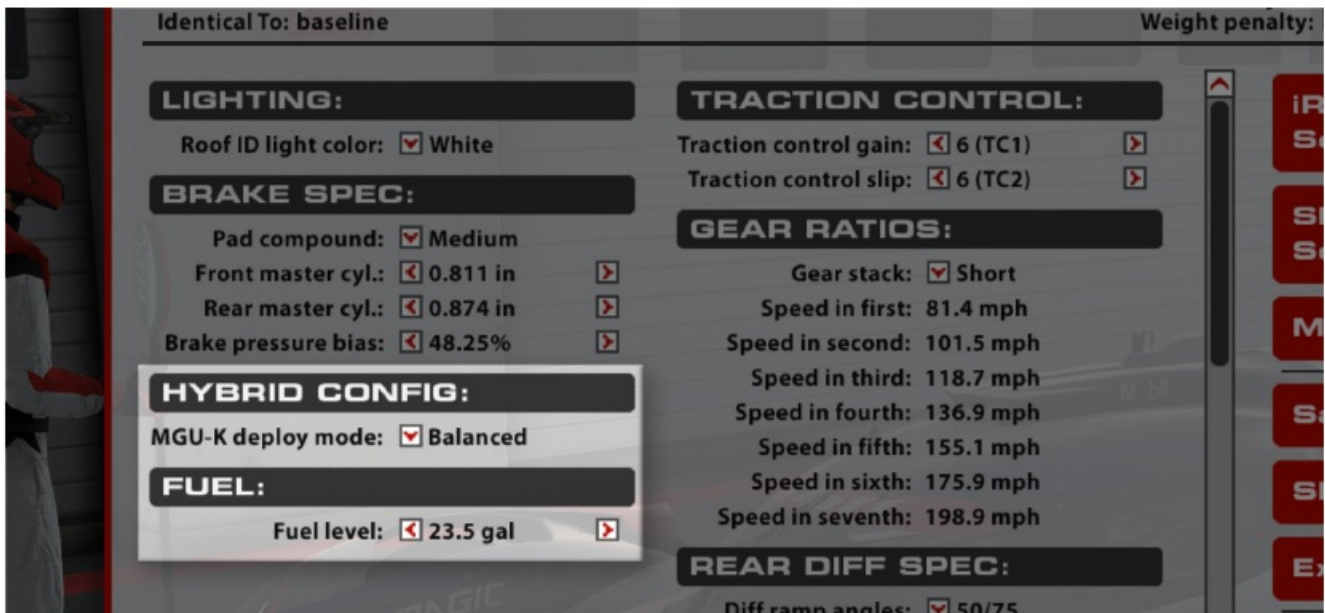
- **REAR MASTER CYLINDER**

The Rear Brake Master Cylinder size can be changed to alter the line pressure to the rear brake calipers. A larger master cylinder will reduce the line pressure to the rear brakes, which will shift the brake bias forwards and increase the pedal effort required to lock the rear wheels. A smaller master cylinder will increase brake line pressure to the rear brakes, shifting brake bias rearward and reducing required pedal effort to lock the rear wheels.

- **BRAKE PRESSURE BIAS**

Brake Bias is the percentage of braking force that is being sent to the front brakes. Values above 50% result in more pressure being sent to the front, while values less than 50% send more force to the rear. This should be tuned for both driver preference and track conditions to get the optimum braking performance for a given situation.

## **HYBRID CONFIG & FUEL**



The Acura ARX-06's hybrid system can be set to one of five deploy modes to alter the target State of Charge (SoC) for the end of a lap. Each of these modes will use varying levels of energy throughout a lap to reach a target, and thus some will produce more power over the course of a lap and faster lap times at the cost of discharging the battery.

- **NO DEPLOY**

In the "No Deploy" mode, the Hybrid system will not use any energy stored in the battery. This essentially disables the Hybrid drive system and will only charge the battery throughout a lap. This is only available in Qualifying and Test sessions and is used to fully charge the battery before switching to Qual mode.

- **QUAL**

This mode is intended to be used on flying laps during qualifying sessions and will attempt to use all of the battery charge during a lap. This is only available during Qualifying and Test sessions and should be preceded by the No Deploy setting on outlaps and warmup laps to ensure the battery is fully charged before switching to the Qual mode.

- **ATTACK**

Attack mode reduces the target State of Charge to use more power during race sessions to help with overtaking. Generally the laptime gain from this mode is not enough to offset the loss in pace from having to recharge and recover from using Attack mode, so it should be used only when it is absolutely necessary to complete an overtake. This mode can also be used on the final lap for a burst of speed since the battery is no longer needed. This mode is only available for Practice, Race, and Test sessions.

- **BALANCED**

The Balanced mode is the primary Race mode for the Hybrid system. This mode will attempt to deploy electrical charge to reduce lap times as much as possible while still maintaining a reasonable State of Charge over the duration of a lap. At the start of a session, it will take a few flying laps for the Hybrid system to learn the track and optimize deployment for the best lap times, and this mode is only available in Practice, Race, and Test sessions.

- **BUILD**

The Build mode will attempt to build battery charge as quickly as possible in the event of a low battery charge or if it is needed prior to switching to Attack mode. Note that this will compromise lap times significantly compared to Balanced, and it's important to switch back to Balanced mode once the battery has charged to

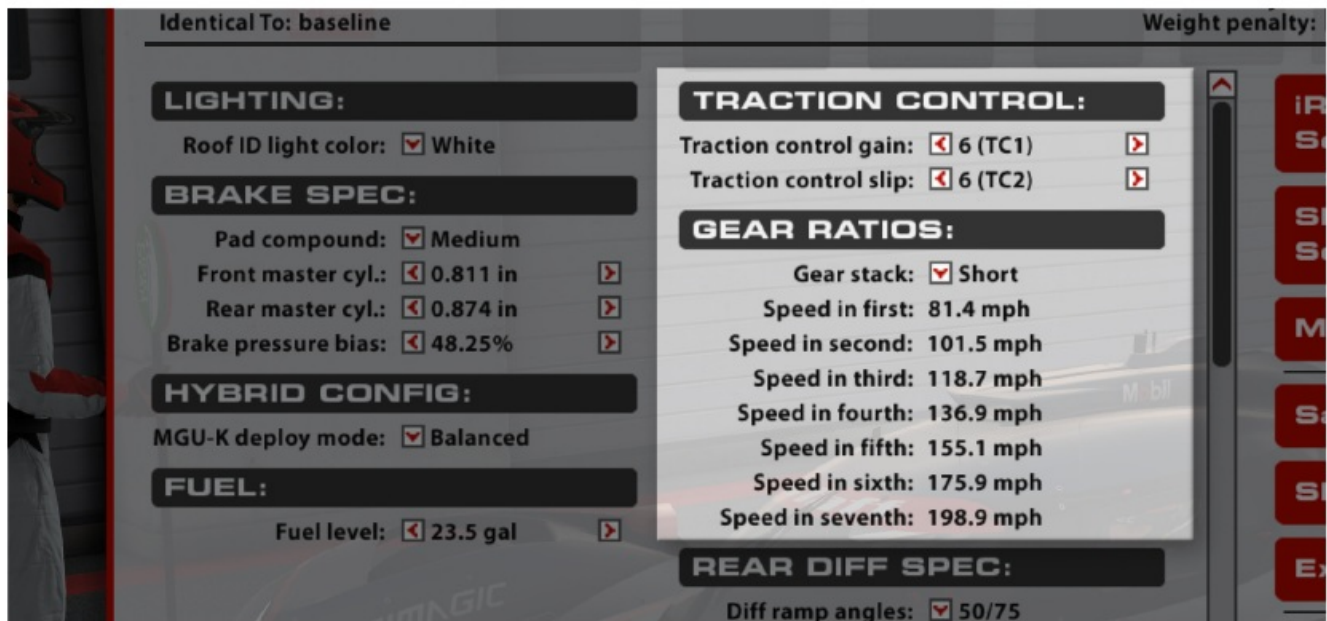


avoid losing harvested energy and to prevent unnecessary loss in pace. This mode is only available in Practice, Race, and Test sessions.

- **FUEL LEVEL**

Fuel level is the amount of fuel in the fuel tank when the car leaves the garage.

## TRACTION CONTROL & GEAR RATIOS



- **TRACTION CONTROL GAIN**

Gain is the amount of intervention the Traction Control will exert when wheel spin is detected. Higher values result in a more aggressive throttle cut to control wheelspin. This value can be changed in the F8 black box while driving.

- **TRACTION CONTROL SLIP**

Slip is how sensitive the Traction Control system will be to wheelspin. Higher values will activate the Traction Control system with smaller amounts of wheelspin, while lower values will allow slightly more wheelspin prior to activating the system. This value can be changed in the F8 black box while driving.

- **GEAR STACK**

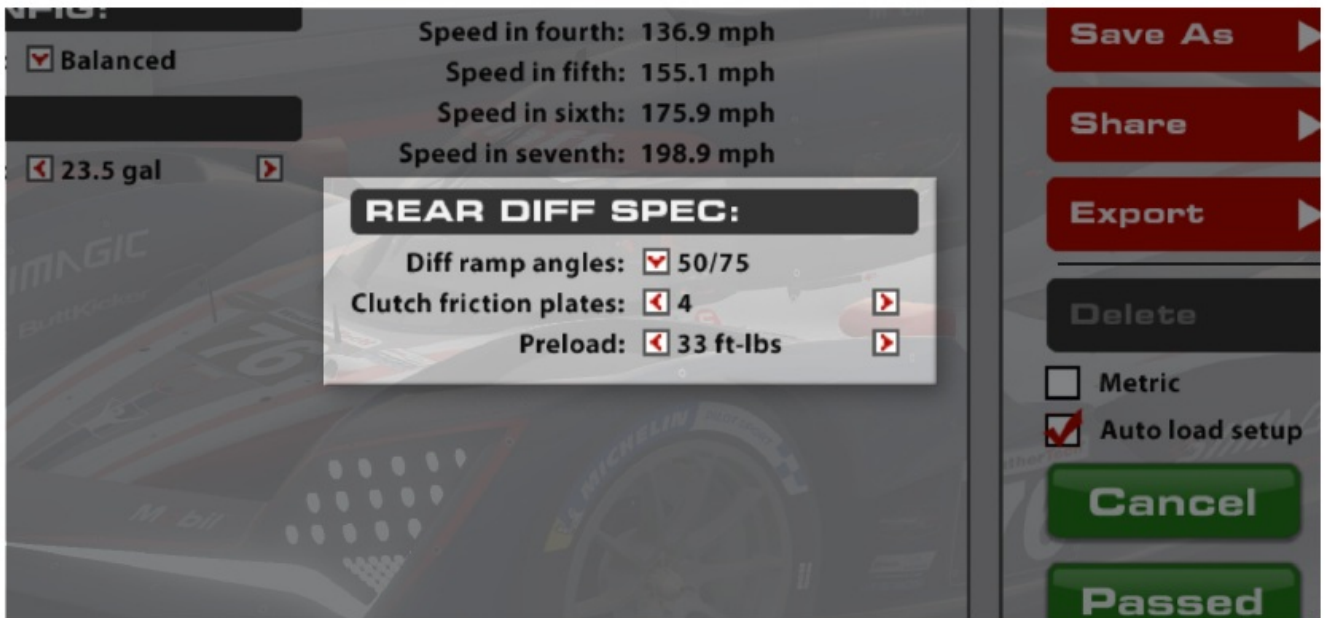
Gear Stack changes the gear ratios in the transmission. Two choices are available: Short and Long. The Short setting will choose a more acceleration-focused gear set for tracks with shorter straights or slower corners, while the Long option will choose gears more suited to high-speed tracks with long straights.

- **GEAR SPEEDS**

Each of the transmission's seven forward gears will show the approximate ground speed at which the engine will reach maximum RPM. These values will change based on which Gear Stack is selected, but the true maximum speed may differ slightly due to on-track conditions.

## REAR DIFF SPEC

-



## DIFF RAMP ANGLES

The Differential Ramp Angles affect the force exerted by the differential to keep both driven tires locked together under acceleration. Lower values produce more locking force, and more locking force increases understeer during braking and acceleration phases. Higher values will produce less locking force and induce oversteer in these situations.

- **CLUTCH FRICTION PLATES**

The number of clutch faces affect how much overall force is applied to keep the differential locked. Treated as a multiplier, adding more faces produces increasingly more locking force.

- **PRELOAD**

- The differential can be set with a static load applied. Higher values produce more locking force in the differential in all conditions, producing more understeer under acceleration and deceleration. This value will also affect mid-corner performance, with higher values not allowing the differential to unlock as much, increasing mid-corner understeer.

## SETUP TIPS

This section is aimed toward helping users who want to dive deeper into the different aspects of the vehicle's setup.

## SETUP TIPS

### PROVIDED SETUPS

There are 12 iRacing setups provided for the Acura ARX-06 GTP: BASELINE

A slightly more stable version of the high downforce setup for a driver's first time in the car or for those wanting more stability than the high downforce setup provides.

- **HIGH DOWNFORCE**

For use at most tracks. Although quite efficient and creating the most downforce, this setup also makes the most drag.

- **MEDIUM DOWNFORCE**

For use at track with long straights like Spa. Sacrificing more downforce and efficiency for more straight line speed.

- **LOW DOWNFORCE**

For use at Le Mans. Lowest drag and downforce trim.

- **DAYTONA**

A variation of the Low Downforce setup for use at Daytona with changes to avoid bottoming on the oval banking.

- **DAYTONA 24H**

A variation on the Daytona setup made specifically with time of year, expected weather, and the demands of a 24 hour race setup in mind.

- **FIXED**

The high downforce setup with limited fuel for the official IMSA fixed series.

- **FIXED QUAL**

The fixed series setup with qualifying fuel and hybrid deployment.

- **FIXED LEMANS**

The low downforce setup with limited fuel for the official IMSA fixed series.

- **FIXED LEMANS QUAL**

The fixed LDF series setup with qualifying fuel and hybrid deployment.

- **FIXED DAYTONA**

The Daytona setup with limited fuel for the official IMSA fixed series.

- **FIXED DAYTONA QUAL**

The Daytona series setup with qualifying fuel and hybrid deployment.

- The fuel level in all setups (except the fixed IMSA setups) are set to 89 L, which is the maximum tank capacity for this car.

## **CHASSIS HEIGHTS**

- The Acura ARX-06 generates the most downforce with an average rear ride height around 45mm and an average front ride height around 25mm.
- More rake (high rear ride heights compared to front ride heights) will move aero balance forward, inducing oversteer, and less rake will shift the aero rearward and induce understeer.
- You can affect the dynamic ride heights (without changing the roll stiffness) on track by adjusting the front heave spring and the rear heave spring.
- A soft rear heave spring will allow the rear of the car to drop under aero load but you will lose some amount of downforce and efficiency mid corner as the rear ride heights will be well under the target rear heights for maximum downforce (45mm). Some compromises will need to be made regarding drag/downforce and dynamic aero balance.

## **AERODYNAMIC ADJUSTMENTS**

- Should you choose to make adjustments to the setup, the easiest way to change the aerodynamic balance of the setup is through adjustment of the rear wing angle. Generally speaking, if you find you want to adjust wing position in more than a click in either direction it is recommended you start from one of the other downforce trim setups (high, medium, or low).



- Lower wing angle = More oversteer, less downforce, and higher straight line speed.
- Higher wing angle = More understeer, more downforce, and lower straight line speed.
- If you would like to change the aero balance without changing the downforce/drag trim adjust the rear ride height by increasing or decreasing the rear pushrod length offset. This will affect balance in all situations due to the high amount of downforce but this will be particularly noticeable in mid and high speed corners.
- Lower pushrod length delta = Lower rear ride height, less rake, and a more rearward aero balance (understeer).
- Higher pushrod length delta = Higher rear ride height, more rake, and a more forward aero balance (oversteer).

## MECHANICAL ADJUSTMENTS

- If you would like to change the mechanical balance without changing the aero balance the front and rear ARBs and ARB blades may be adjusted. This can be particularly useful if you are happy with the general balance of the car but want either more or less rotation in slow speed corners.
- Bigger front ARB/higher blade value = More understeer  
Smaller front ARB/lower blade values = Less understeer
- Bigger rear ARB/higher blade values = More oversteer
- Smaller rear ARB/lower blade values = Less oversteer


## DIFFERENTIAL ADJUSTMENTST

he rear differential is a powerful tool in the Acura, and the simplest change one can make is increasing or decreasing the preload. While adjusting the preload will affect the on throttle behavior you will probably notice more of a change on entry and turn in.

More preload = Less rotation off throttle, more stability on entry.

Less preload = More rotation off throttle, less stability on entry.

## Documents / Resources

	<p><a href="#">iRacing ACURA ARX-06 GTP Buggy</a> [pdf] User Manual ARX-06-GTP, ACURA ARX-06 GTP Buggy, ACURA ARX-06 GTP, Buggy</p>
---	---

## References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.