

XSR Setup Guide

Intro:

This setup guide is for use with GTR2 sim racing, although I'm sure it could be applied to other games. Its purpose is to give drivers with minimal knowledge about making their car fast for any given race a resource to go to about how to set their car up. It also helps some of us veterans out. I know it has helped me a lot over the years. Be sure to use this guide in Simulation Mode of the game so that aids don't interfere with your results for each change you make.

This guide is an adaptation of one I found years ago. I'm just updating it a little bit. The original author used a table format and so will I. Make sure to turn some laps before making any changes to take note of what the car is doing so you can start at Step 0. One last minute note; make sure to save between successful steps so that if you make a negative change you can revert back to what was previously working. Push each change as far as you can to find the line between positive change and negative change, but make changes in small increments to avoid going too far.

Guide Key:

| Green- Goal result from setup changes | | Red- Increases tire wear | Blue- Decreases tire wear |
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| Step | Part | Indicator/desired result | Action |
| 0 | Default Setup | - | Change GTR2's default setup for your car |
| | | - | Select tires based on weather & race length |
| | | - | Choose radiator opening (length & temp.) |
| | | - | Choose rev limit |
| | | - | Choose fuel amount (length & weather) |
| 1 | Gear Box | Reaching rev limit at top gear before end of longest straight | Length top gear ratio & re-arrange 2nd-4th or 5th for even spacing |
| | | Rev limit is not reached on longest straight | Shorten top gear ratio & re-arrange 2nd-4th or 5th for even spacing |
| | | Reaching rev limit at end of longest straight | No Change |
| 2 | Brake Duct | Brake Temp lower than 300° C on straights | Lower brake duct openings |
| | | Brake Temp higher than 800°C when braking | Open brake duct openings |
| | | Brake temp always between 300°-800° C | No Change |
| 3 | Camber | Difference in int. & ext. tire temp is <0°C | Increase Negative Camber |
| | | Difference in int. & ext. tire temp is >5°C | Decrease Negative Camber |
| | | Difference in int. & ext. tire temp is between 0° and 5° C | No Change |
| | Tire Press. | Center of Tire colder than edges | Increase Pressure |
| | | Center of tire hotter than edges | Decrease Pressure |
| | | Center of tire is between int. & ext. temps | No Change |

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| 4 | Brake Bias | Front wheels lock first (tight in corners) | Adjust Bias towards rear |
| | | Rear wheels lock first (loose in corners) | Adjust Bias towards front |
| | | Front & rear wheels lock at same time | No Change |
| 5 | Steering Lock | Steering at 100% in sharpest turn | Increase Lock |
| | | Steering at 50% in sharpest turn | Decrease Lock |
| | | Steering at 90% in sharpest turn | No Change |
| 6 | Diff. Power | Good propulsion but tight under power | Decrease Power |
| | | Lack of propulsion exiting corners | Increase Power |
| | | Balance of understeer & propulsion | No Change |
| | Diff. Coast | Stable braking, lift-off understeer | Decrease Coast |
| | | Unstable braking, lift-off oversteer | Increase Coast |
| | | Balance of understeer & stable braking | No Change |
| | Diff. Preload | Car too nervous in transition from braking to acceleration | Decrease Preload |
| | | Car not responsive enough transitioning from braking to acceleration | Increase Preload |
| | | Good responsiveness in transition | No Change |
| 7 | Splitter | Fast Track (i.e. Monza) | Set Splitter to 1 |
| | | Every other track | Set Splitter at 2 |
| | Wing | Car understeers in fast curve (120+ kph) | Decrease Rear Wing |
| | | Car oversteers in fast curve (120+ kph) | Increase Rear Wing |
| | | Car is neutral or slightly oversteering | No Change |
| 8 | Gear Box | Reaching rev limit at top gear before end of longest straight | Length top gear ratio & re-arrange 2nd-4th or 5th for even spacing |
| | | Rev limit is not reached on longest straight | Shorten top gear ratio & re-arrange 2nd-4th or 5th for even spacing |
| | | Reaching rev limit at end of longest straight | No Change |
| 9 | Caster | Steering soft, limp/understeer | Increase Caster |
| | | Steering too firm/unstable in fast curves | Decrease Caster |
| | | Stable car & steering as desired | No Change |
| 10 | Front Toe | Turn-In is hard | Increase Negative Toe (more negative) |
| | | Lacking straight line stability | Decrease Negative Toe (less negative) |
| | | Balance between turn-in and straight line stability | No Change |
| | Rear Toe | Looking for more top speed | Decrease Negative Toe (less negative) |
| | | Rear end unstable in straight line | Increase Negative Toe (more negative) |
| | | Good rear end stability in straight line | No Change |

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| 11 | Ride Height (Motec) | Motec shows car bottoming out | Increase Ride Height keeping rear 10-20 mm higher than front |
| | | Motec shows car is too high | Decrease Ride Height keeping rear 10-20 mm higher than front |
| | | Motec shows car is lowest w/o touching ground | No Change |
| 12 | Camber | Difference in int. & ext. tire temp is $<0^{\circ}\text{C}$ | Increase Negative Camber |
| | | Difference in int. & ext. tire temp is $>5^{\circ}\text{C}$ | Decrease Negative Camber |
| | | Difference in int. & ext. tire temp is between 0° and 5°C | No Change |
| | Tire Press. | Center of Tire colder than edges | Increase Pressure |
| | | Center of tire hotter than edges | Decrease Pressure |
| | | Center of tire is in between int. and ext. temps | No Change |
| 13 | Front Roll Bar | Imprecise steering in slow curves | Increase Front ARB |
| | | Need more grip in slow curves | Decrease Front ARB |
| | | Good grip/steering accuracy balance | No Change |
| | Rear Roll Bar | Car understeers in slow curve | Increase Rear ARB |
| | | Car oversteers in slow curve | Decrease Rear ARB |
| | | Neutral handling in slow curve | No Change |
| 14 | Camber | Difference in int. & ext. tire temp is $<0^{\circ}\text{C}$ | Increase Negative Camber |
| | | Difference in int. & ext. tire temp is $>5^{\circ}\text{C}$ | Decrease Negative Camber |
| | | Difference in int. & ext. tire temp is between 0° and 5°C | No Change |
| | Tire Press. | Center of Tire colder than edges | Increase Pressure |
| | | Center of tire hotter than edges | Decrease Pressure |
| | | Center of tire is between int./ext. temps | No Change |
| 15 | Springs (Global) | Car sluggish to controls | Harden Front & Rear Springs |
| | | Car too nervous & globally lacks grip | Soften Front & Rear Springs |
| | | Car is responsive & Steady | No Change |
| | Springs (Balance) | Car globally understeering (mid corner) | Harden Rear Springs OR Soften Front Springs |
| | | Car globally oversteering (mid corner) | Harden Front Springs OR Soften Rear Springs |
| | | Car is Globally Neutral (mid corner, no gas/brakes applied) | No Change |
| 16 | Ride Height (Motec) | Motec shows car bottoming out | Increase Ride Height keeping rear 10-20 mm higher than front |
| | | Motec shows car is too high | Decrease Ride Height keeping rear 10-20 mm higher than front |
| | | Motec shows car is lowest w/o touching ground | No Change |

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| 17 | Camber | Difference in int. & ext. tire temp is $<0^{\circ}\text{C}$ | Increase Negative Camber |
| | | Difference in int. & ext. tire temp is $>5^{\circ}\text{C}$ | Decrease Negative Camber |
| | | Difference in int. & ext. tire temp is between 0° and 5°C | No Change |
| | Tire Press. | Center of Tire colder than edges | Increase Pressure |
| | | Center of tire hotter than edges | Decrease Pressure |
| Center of tire is between int./ext. temps | | No Change | |
| 18 | Shocks Bump/Rebound <i>Slow</i> | Weight transfer too fast causing lost grip | Slightly Harden Front & Rear |
| | | Weight transfer too slow/Car nervous in curves | Slightly Soften Front & Rear |
| | | Car understeers in Entry & Exit | Harden Rear OR Soften Front |
| | | Car oversteers in Entry & Exit | Soften Rear Or Harden Front |
| | | Balanced transfers & neutral handling | No Change |
| | Shocks Bump/Rebound <i>Fast</i> | Bumpy Track/ lose grip over bumps & curbs | Slightly Soften Front & Rear |
| | | Car bounces over bumps losing grip | Slightly Harden Front & Rear |
| | | Car understeers over bumps | Harden Rear OR Soften Front |
| | | Car oversteers over bumps | Soften Rear OR Harden Front |
| | | Balanced car & neutral handling | No Change |
| 19 | Ride Height (Motec) | Motec shows car bottoming out | Increase Ride Height keeping rear 10-20 mm higher than front |
| | | Motec shows car is too high | Decrease Ride Height keeping rear 10-20 mm higher than front |
| | | Motec says car lowest w/o touching ground | No Change |
| 20 | Packers (motec) | Ride height Properly adjusted, but car still touches ground on bumps | Increase Packers to prevent ground contact |
| | | Car never touches ground | No Change |
| 21 | Camber | Difference in int. & ext. tire temp is $<0^{\circ}\text{C}$ | Increase Negative Camber |
| | | Difference in int. & ext. tire temp is $>5^{\circ}\text{C}$ | Decrease Negative Camber |
| | | Difference in int. & ext. tire temp is between 0° and 5°C | No Change |
| | Tire Press. | Center of Tire colder than edges | Increase Pressure |
| | | Center of tire hotter than edges | Decrease Pressure |
| | | Center of tire is between int./ext. temps | No Change |