

Lenkrad Tips gefragt...

Geschrieben von Batschi - 10.01.2019 20:46

so, jetzt habe ich meine ersten ABB-Runden gedreht, es macht mir Spass und ich werde wohl bleiben...

Bislang habe ich ja nur offline gespielt, und das ist mit dem Gamepad auch so halbwegs gegangen, aber jetzt habe ich den Beschluss gefasst, mir ein Lenkrad zuzulegen, weil da wohl kein weg daran vorbei fÃ¼hrt, wenn man hier richtig Spass haben mÃ¶chte...und da kommt ihr ins Spiel: ich brauche Tips fÃ¼r eine gutes Lenkrad, das aber auch einigermaÃŸen gÃ¼nstig sein soll(mir ist schon klar, dass ein Logitech um 250euro und mehr wohl die beste LÃ¶sung ist...)

Gibt es einigermassen taugliche LenkrÃ¤der unter 200euro, und welche wÃ¤ren das...?

zur Info: ich spiele seit ungefÃ¤hr einem Jahr GTL, zuvor habe ich noch keine Racing-Sim gespielt, hatte aber immer wieder mal so meine Gran Turismo Phasen...also was Sims angeht bin ich eher ein Rookie...

danke im voraus fÃ¼r eure Hilfe!

=====

Aw: Lenkrad Tips gefragt...

Geschrieben von MichaW - 10.01.2019 21:10

Hiho,

ich denke mit einem Thrustmaster fÃ¼r 150-200 â, kann man auch nicht soviel falsch machen, darunter wÃ¼rd ich aber nicht gehen...

https://www.amazon.de/s/ref=nb_sb_noss_1?__mk_de_DE=%C3%85M%C3%85%C5%BD%C3%95%C3%91&url=searchalias%3Daps&field-keywords=thrustmaster+lenkrad

GlÃ¼ck auf!

=====

Aw: Lenkrad Tips gefragt...

Geschrieben von 73mcclure - 10.01.2019 21:14

genau...soll ja auch spass machen:lol:
lg,jo

=====

Aw: Lenkrad Tips gefragt...

Geschrieben von hayman3030 - 10.01.2019 21:51

Hi

ich benutze seit langem ein Logitech Driving Force GT. Gibtâ's gebraucht bei ebay-kleinanzeigen um die 70-100â,. Hat kein Kupplungspedal, ist aber nicht unbedingt nÃ¶tig fÃ¼r GTL.

GruÃŸ hayman

=====

Aw: Lenkrad Tips gefragt...

Geschrieben von Miki - 11.01.2019 08:23

Nimm das G25, lag vor Weihnachten bei teilweise 145 â, in der Bucht. Kleiner Tip mehr bei Ebay-Kleinanzeigen schauen das ist das meiste gÃ¼nstiger als bei Ebay direkt.

Als Tip ist der Lenker und die Schaltung abgegriffen FINGER WEG.

Das G25 kann auch unsichtbare Probleme haben, zB. Risse in der Innenschale, kann man feststellen wenn man den Lenker Rauf/Runter bewegt, wenn da Spiel drin ist ist die Schale gerissen. Habe mir dafür mal Ringe drehen lassen aus Kunststoff, die klebt man einfach mit 2K Kleber über dem Lager ein und das hält bei mir bereits seit 8 Jahren, Zeitaufwand 30 Minuten (Dafür lag der Lenker dann auch deutlich unter 100,- und wird auf einem viel benutzten System das auf Partys auch mal von richtig Besoffenen gefahren wird benutzt.

G25 Pedale haben selten Ausfall und wenn dann eben die Potis ausblasen und geht wieder.

Gruß Miki

Aw: Lenkrad Tips gefragt...

Geschrieben von Batschi - 11.01.2019 19:37

danke für die Tips...

es ist ein Thrustmaster TMX Force geworden.. war verbilligt und die Testberichte dazu haben mich überzeugt... jetzt heißt es warten bis Mittwoch/Donnerstag

Aw: Lenkrad Tips gefragt...

Geschrieben von dikl - 11.01.2019 20:30

Hello Batschi,
ein gutes Lenkrad ist ziemlich hilfreich.
Vollständig wird der Effekt dann durch ein sehr gut eingestelltes FFB.

Hier gibt es viele Informationen:
http://www.altbierbude.de/component?option=com_fireboard&Itemid,99/func,view/id,20789/catid,3/lang,de/

Viel Vergnügen und Erfolg beim Setup.

Gruß
dikl

Aw: Lenkrad Tips gefragt...

Geschrieben von MichaelE39 - 11.01.2019 21:57

Hello,

wie von dikl gepostet, den Beitrag von Taffy unbedingt 10 mal "durchackern", der ist Gold wert.

Das richtige FFB Feeling kommt erst nach dem Anpassen der Parameter auf.

Das original FFB, wie in der PLR Datei voreingestellt, ist nicht so pralle.

Dauert einige Versuche und Proberunden, lohnt sich aber.:)

Im weiteren Verlauf der Threads finden sich viele Aussagen von PLR-Dateien von Fahrern, meine da sind auch Thrustmaster Einstellungen dabei.

Aw: Lenkrad Tips gefragt...

Geschrieben von Batschi - 21.01.2019 12:33

sodele, jetzt habe ich mein Lenkrad und auch schon mit den Einstellungen recht viel herumgetestet, bin mit dem Ergebnis noch nicht wirklich zufrieden...auf den Geraden und langen und weiten Kurven passt alles ganz gut, aber bei engen Kurven und insbesondere Schikanen passt das Lenkverhalten noch gar nicht...

Habe da 3 Referenzstrecken um zu Testen(Bergrennen Remlingarde, Meadowdale und Enna Pergusa), und zb die Schikanen bei der Enna Pergusa kann ich fast nur in besseren Schrittempo durchfahren, da steuert es zunächst unter, dann beim Gegenlenken steuert es über, und es macht im Endeffekt keine Spass- und die Rundenzeiten sind um über 10 Sekunden langsamer als mit dem Controller...

...ist das jetzt einfach Lehrgeld, dass man beim Umstieg von Controller zum Lenkrad bezahlen muss, oder liegt das schon auch daran, dass ich bei den Einstellungen in der plr-Datei etwas noch nicht richtig eingestellt habe...?
Es hat sich schon viel zum besseren geändert, nachdem ich den Text von Taffy gelesen und entsprechende Änderungen gemacht habe(mit den Originaleinstellungen konnte ich überhaupt nichts anfangen, da waren fast alle Autos unfahrbar...), aber jetzt stehe ich an, und schaffe es nicht wirklich, die Einstellungen so hinzubekommen, dass ich auch Schikanen und enge Kurven so fahren kann, wie ich das gerne möchte(und mit den Controller auch schon konnte)

Vielleicht hat wer ja gute Tipps, wo genau ich da noch herumschrauben sollte...

Danke wie immer im voraus für eure Antworten...

Aw: Lenkrad Tips gefragt...

Geschrieben von hayman3030 - 21.01.2019 17:05

Hi

vergrößere mal den Lenkeinschlag in der Garage.

Ich fahr mit 360° Wheel, hab normalerweise einen Lenkeinschlag von 12-15, je nach Auto. Bei engen Kurven vergrößere ich dann auf 17 oder mehr.

Viel Erfolg
hayman

edith: ich bin ganz am Anfang mit Keyboard gefahren, hat sehr lange gedauert, bis ich mit dem Wheel genauso schnell war. Bin allerdings mit dem Wheel auch nicht schneller geworden. Macht aber viel mehr Spaß damit.
Also. Gewährung.....

Aw: Lenkrad Tips gefragt...

Geschrieben von 73mcclure - 21.01.2019 17:19

bei 900 grad probiere mal den lenkeinschlag im setup auf 18.

ansonsten findet montags ab 20 h der setup guide statt (plakat auf der startseite beachten)
seehr zu empfehlen für fragen aller art:lol:

Ig,jo

Aw: Lenkrad Tips gefragt...

Geschrieben von MichaelE39 - 21.01.2019 17:22

Hallo,

was mir noch einfällt, ist die imgame Einstellung "SSP Lenkung", so eine Art Lenkunterstützung.

Diese habe ich bei auf auf 0 bei Lenkradbetrieb.

Aus eigener Erfahrung kann ich bestätigen, das der Wechsel von Gamepad auf Lenkrad schon 1-2 Wochen dauert hat.

Man muÃŸ sich halt erst an die groÃŸe "Kurbelei" gewÃ¶hnen.B)

Bei 900° Lenkwinkel fahre ich ingame 28 bis 30 Lenkeinschlag.

Deckt sich also mit den Werten von Hayman.

=====

Aw: Lenkrad Tips gefragt...

Geschrieben von dikl - 21.01.2019 20:30

Batschi schrieb:

Danke wie immer im voraus fÃ¼r eure Antworten...

Hello Batschi,

du hast es so gewollt: :P

Hier noch eine 'englische' Anleitung, die ich irgendwann gefunden habe. Habe im Moment keine Ãœberblick, ob schon mal im Forum gepostet wurde.

GruÃŸ

dikl

=====

It's for GTR, but it works fine with rFactor as well. It helped me a lot. I hope you'll find this useful.

!!!BACKUP YOUR CONTROLLER.INI FIRST!!!

* Force Feedback Tweaking Guide for Simbin Games *

* Julien Regnard v1.0 *

**

* Disclaimer (a tradition as soon as it deals with hardware): *

* I assume no responsibility for any damage. *

* Don't forget that the energy you spend turning the wheel always *

* end mostly as friction heat and gears ageing. *

* Too strong and jerky FFB will shorten the life of your wheel. *

*

1. Why

Recently I was lucky to buy a G25, and I wanted to configure FFB in GT Legends for it, as there is no preset for G25. Quickly it appeared that the only thing I could do was to download and test various setups other people did or to change randomly FFB parameters until I was satisfied.

As the setups I downloaded didn't solve the problems I had with GTR2 (FFB spikes on every track polygon when turning hard with Porsche) I finally had to change the parameters.

This way I finally managed to understand better the role of each FFB parameter in PLR files, and I discovered that the FFB setup accounts for a very large part in the sim.

A good setup can make a sim feel more realistic, or easier to drive, and a bad setup can ruin it, or even give the impression the physics model is wrong or limited.

There are so many wheels, with different motors, different linearity, different lock-to-lock angle, and so many drivers with different taste that default FFB setups can feel good only for a minority.

FFB is a matter of taste, everyone has its own setup, I hope this guide will help you to find quickly a setup that fits your taste and your wheel.

Personnaly, I wanted to find a setup that feels more like a real wheel (even if it means slower laps) rather than a "magical" setup to go faster.

2. FFB forces

A. Available forces...this is what you can feel in Simbin games:

* The most important, steering force:

How the tyres are pushing the wheel through the steering column. With this force you can feel how the car weight is "moving" from one side to the other, and back to front, and road holes, bumps, grass, 3D strips...

This is the most important thing, even more than grip, because this force will warn you before grip is lost, and you will feel where car limits are.

This force countersteers when the car is oversteering, brings the wheel in line when you let it turn.

* tyre grip:

In Simbin games, tyre grip is massively exaggerated in FFB and added to cornering force, to make the wheel loose when you have lost grip. This helps to understand quickly what are the grip limits of a car, but it often masks very valuable information like slight changes in steering forces.

* steering column Friction and Damper:

All steering columns use a steering multiplication, and sometimes a power steering assistance. It helps the driver a lot, and it makes the steering less direct.

Friction and damper FFB allow you to simulate this effect. This is not calculated by the physics engine, just FFB. And it can entirely change how the sim feels !!

This is what gives steering column a mass, some inertia, makes it loose or very reactive, realistic or not. Without friction and damper the wheel is as light as the internal FFB mechanism allows.

* additional FFB-candy:

- brakes vibration: vibration added when you brake. Helps you to feel how strong you brake, as the vibration slows down with car.

- throttle vibration: vibration added when you accelerate. Helps you to feel how strong you accelerate, as the vibration accelerates with car.

- steering vibration: vibration added when you turn.

- strips vibration and force: vibration and force added when a tyre is over a strip, as some strips are not physical objects, but textures generating no forces on tyres.

- jolts: FFB spikes when you touch another car or a wall.

B. FFB levels

* Low:

steering force (steering+grip)

* Medium

steering force+ damper+ friction+ strips rumble

*High

steering force+ damper+ friction+ strips rumble+ brakes vibration

*Full

steering force+ damper+ friction+ strips rumble+ brakes vibration+ throttle vibration+ steering vibration

3. FFB parameters

For GTL, GTR2, FFB parameters are in each player setup (.PLR files). You can find these files in the folder UserData/*UserName*.

For WTCC Race, FFB parameters are in a .rcs file located in UserData/ControlSet. The file is named like the controller setup you choose in game (for example "Logitech G25 Stick shift.rcs").

When you change these parameters, don't forget to make a backup copy of your PLR (or rcs) file. If you chose a FFB preset in the game, it will override all changes you made previously in the file.

FFB parameters are at the end of file.

Here is a list of the most important parameters with their role (what I think I understood with some tests and experiments, it may be wrong but it seems to work as expected):

A- Global parameters

*FFB Effects Level="4" // Number of FFB effects to use: 0=No Effects, 1=Low, 2=Medium, 3=High, 4=Full, 5=Custom.
If you set it to 1, you just have cornering and grip forces. Other levels activate artificial vibrations. Parameter present in game UI. See 2.B.

*FFB Gain="0.66000" // Strength of Force Feedback effects. Range 0.0 to 1.0. This is overall FFB strength, parameter present in game.

B- Steer force (cornering+grip)

*FFB steer force input max="-11500.00000" // Recommended: 11500 (-11500 if controller pulls in the wrong direction).

This parameter should be changed only if wheel is pulling in the wrong direction. All Logitech wheels have a negative value

*FFB steer force output max="1.70000" // Maximum force output of steering force, recommendation 0.8 to 2.0
This is the maximum output allowed for steering force.

*FFB steer force average weight="0.90000" // How much weight is given to new steering force calculations each frame (0.01 - 1.0). Lower values will smooth out the steering force, but will also add latency.

Every frame, steering force you can feel is an average of previous frame force and new calculated force using this weight.

0.01 means new force is 99% previous frame force and 1% newly calculated force.

0.90 means new force is 10% previous frame force and 90% newly calculated force.

Note that it is framerate dependant...this causes FFB to feel different between two computers with different speed!

In rFactor, this way of smoothing steer force was replaced by a framerate independant algorithm.

This is a very important parameter...a lower value will give you smoother FFB with some latency. For example, with 0.30, it will remove the annoying FFB spikes you can feel in GTR2 with Porsche without adding a noticeable latency!

*FFB steer force exponent="0.75000" // Steering force output "sensitivity". Range 0.0 to infinity. 0.0 to 1.0 = higher sensitivity, greater than 1.0 = lower sensitivity.

This parameter changes the way FFB output is filtered (how the forces increase when you turn the wheelâ€š slower or faster than linearly). Defines how the steering feels (loose or sharp) in the center.

Lower value will give you a sharp steering feeling but will introduce oscillations around center and you will lose details in forces.

Higher values will give you a loose steering in center, but more details in forces.

*FFB steer update thresh="0.000150000" // Amount of change required to update steer force/vibe (0.0 - 1.0). Lower values = steering force updated more frequently = lower frame rate.

FFB forces generated by the wheel are updated only if their value has changed more than this threshold.

To get the most accurate FFB, and if you have no framerate issues, this parameter can be set to 0

*FFB steer force grip weight="0.90000" // Range 0.0 to 1.0, recommended: 0.4 to 0.9. How much weight is given to tire grip when calculating steering force.

This parameters changes the way cornering forces and grip are mixed together.

0.9 means steering force equal 90% grip and 10% cornering. This is a very important parameter. It seems that in Simbin games this parameter is massively exaggerated to focus on grip level.

Unfortunately this exaggeration has a cost: when you lose grip you suddenly lose 90% of forces and it is quite difficult to recover during oversteer as you have only 10% of force to guess what to do.

*FFB steer force grip factor="0.60000" // Range 0.0 to 1.0, recommended: 0.2 to 0.6. How much of a factor the front wheel grip is on the steering weight.

This parameter changes the weight of front and real tyres in the grip force.

0.6 means grip force is 60% front tyres grip and 40% rear tyres grip.

C - steering column friction and damper

Friction forces are resistive forces that depend on the forces applied on the wheel (even if the wheel is not turning). The stronger you push, the stronger it resist.

A high friction steering will be easy to turn in straight line or at low speed (in such condition tyres are easy to turn, you need to apply a moderate force to turn the wheel, and so friction resistive force will be moderate).

But in conditions like high speed and strong turns where tyres are more difficult to turn, resistive friction forces will become stronger (as you are pushing stronger on the wheel). Increasing friction is like removing lubricant.

Damper forces are resistive forces that depend on wheel speed...the faster you turn the wheel, the stronger it resist. Like turning something into a thick fluid. Increasing damper is like increasing fluid thickness.

In Simbin games, steering mechanism effect on feel (usually very important, can kill a good sim) is only simulated using these parameters.

*FFB steer friction coefficient="0.10000" // Coefficient to use for steering friction. Range: -1.0 to 1.0

This parameters defines how strong the steering column friction is.

0.10 means that the steering friction makes the wheel 10% more difficult to turn than the steering force alone.

Higher value give the impression of an old, rusty, non-assisted steering mechanism.

*FFB steer friction saturation="1.00000" // Saturation value to use for steering friction. Range: 0 - 1.0

This parameter defines the maximum value friction force can reach. (it has to be compared to FFB steer force output max)

*FFB steer damper coefficient="0.10000" // Coefficient to use for steering damper. Range: -1.0 to 1.0
This parameters defines how strong the steering column damper is. This coefficient is somehow multiplied by wheel speed to give a resistive force.
Higher value give the impression of a heavier steering column that takes more time and effort to move.

*FFB steer damper saturation="1.00000" // Saturation value to use for steering damper. Range: 0 - 1.0
This parameter defines the maximum value damper force can reach (it has to be compared to FFB steer force output max)

3. Tweaking FFB parameters

Here is a kind of "strategy" in 5 steps (+2 optional) you can apply to obtain whatever feeling you want from Simbin games force feedback. I only take care of most important parameters to make it shorter.

A - Start from a simple FFB setup

To keep the process under control, start from a simple FFB setup.

I start from this setup, no vibrations, no damper, no friction, no tyre grip, 1.0 gain, 1.0 exponent.

```
FFB Effects Level="1"  
FFB Gain="1.00000"  
FFB steer force exponent="1.00000"  
FFB steer force grip weight="0.00000"  
FFB steer force grip factor="1.00000"  
FFB steer friction coefficient="0.00000"  
FFB steer friction saturation="1.00000"  
FFB steer damper coefficient="0.00000"  
FFB steer damper saturation="1.00000"
```

Try it...what you feel is tyre load and cornering forces...of course, the wheel is too light in center, jerky, it moves a lot, but you can feel mass transfer information.

B - Introduce front wheels grip level.

Increase parameter "FFB steer force grip weight". This is the weight of grip information in the forces you can feel. It makes the wheel lighter when you lose grip. Too low and you feel nothing, too high and it kills some info like mass transfer.

If you increase it reasonably, you feel the wheel slightly lighter when understeering. I try to increase it until the wheel becomes as light when I understeer (grip info) than when I oversteer (mass transfer info).

C - introduce rear wheels grip level. (Optional)

For the moment, grip information you added is 100% front grip. You feel oversteering through mass transfer. This is what happen in real steering and can be enough for wheels with sharp FFB like G25.

If you really want to add rear tyre grip information, you can change parameter "FFB steer force grip factor".

Currently the value is 1.0 It means the grip info added is 100% front grip. If for example you set it to 0.8 grip info becomes 80% front, 20% rear.

If you want a realistic setup, keep it 1.0. If you want more information, lower it.

D - adjust steering force smoothing to get rid of FFB spikes and feel better car mass.

Steering force output is filtered every frame, using the parameter "FFB steer force average weight".

Output for current frame = calculated steering force for currentFrame *coeff+(1.0-coeff)*Output for previous frame
It allows to get rid of FFB spikes occurring on tracks polygon limits but introduces latency.

This table shows, for different values of the "FFB steer force average weight" parameter, events which are filtered...this is also roughly equal to the latency introduced.

For example, when parameters value is 0.32, you will not feel anymore FFB spikes that last less than 2 frames. If your average framerate is 50 fps, it means you get rid of spikes lasting less than $2 \times 1/50 = 0.04s$

Coef value Duration of events filtered = latency (in frames)

0.95	0.25
0.79	0.5
0.54	1
0.32	2

0.23 3
0.18 4
0.145 5
0.12 6
0.106 7
0.093 8
0.083 9
0.075 10

Note that this is framerate dependant (rFactor changed this algorithm to avoid this dependency). It means that computers with a higher framerate filter less and less the spikes and have a jerky FFB.

Try to decrease this parameter until you are satisfied with FFB smoothness without being disturbed by latency. FFB overall strength will decrease when filtered but this will be corrected later.

With an average framerate of 60 I use 0.28 to get rid of spikes without any annoying latency. This was very helpful with Power & Glory mod and it allows to have a smooth steering without damper, which is nice because damper may have a bad effect in critical manoeuvres.

E- adjust steer force output level to compensate for smoothing.

As you noticed, smoothing decreases the level of forces.

Increase slightly "FFB steer force output max" until it feels better...stay in reasonable limit (recommended range is 0.8-2.0)

F- introduce damper and friction. (Optional)

What you can feel now are forces coming directly from tyres and suspension geometry, reproduced without distortion. Steering multiplication mechanism (and power assistance) change dramatically how the steering feel.

They introduce smooth damper and friction forces you can feel all the time when you steer, and moderate tyre forces. They make tyre forces more present close from center and less strong far from center to give a better feeling of the track.

If you want to simulate the direction column, set these two parameters:

FFB steer damper coefficient : defines how much dampered the steering is. 0.0 is unrealistic, 0.2 is reasonably dampered, 0.4 corresponds to a modern road car assisted direction, heavily dampered.

FFB steer friction coefficient : it should be negative, half the value of damper, to be sure that the wheel moves fast when required by the car movements. For example, if you like damper 0.2, friction between -0.1 and -0.2 gives nice results.

G- adjust wheel behavior in center.

To adjust wheel behavior in center and change steering sensitivity, change "FFB steer force exponent".

Lower value will give you a sharp steering feeling but will introduce oscillations around center like if a centering spring was used, and you will lose details in forces.

Higher values will give you a loose steering in center, but more details in forces.

Tip: to adjust this parameter, check wheel countersteering behavior...when you heavily oversteer and then the rear is brutally coming back and starts oversteering the other way....wheel should countersteer quickly.

Lower the parameter until you are satisfied with wheel countersteering behavior in such situation.

For information, default Simbin value is 0.75 and you should not go lower than 0.5 otherwise the wheel will oscillate violently around center.

It's done. Now you can increase FFB Effects Level to turn on all vibrations.

Aw: Lenkrad Tips gefragt...

Geschrieben von Batschi - 24.01.2019 23:41

danke noch mal fÃ¼r die Tips, hab jetzt eine brauchbare Einstellung gefunden Ã¼be viel...hab mir die Umstellung vom Controler zum Lenkrad einfacher ertrÃ¤umt, aber jetzt fangt es schÃ¶n langsam richtig Spass zu machen, ein wenig dauert's noch, bis ich mich online traue ;)

=====

Aw: Lenkrad Tips gefragt...

Geschrieben von 73mcclure - 25.01.2019 13:06

...vom offline fahren bekommt man grÄ¼ne zÄ¤hne...:whistle:
lg,jo

=====

Aw: Lenkrad Tips gefragt...

Geschrieben von Holger_B - 25.01.2019 15:34

Moin zusammen,

dikl schrieb:

Hier noch eine 'englische' Anleitung, die ich irgendwann gefunden habe. Habe im Moment keine Ãœberblick, ob schon mal im Forum gepostet wurde.

GruÃŸ
dikl

...

danke Dirk, die Anleitung kannte ich noch nicht, und die ist meines Wissens nach auch nicht unter dem "Sticky post" "1000 legale Steuertricks"!

Da weicht doch so einiges von meinen G25-PLR-Settings ab, und ich habe gerade schon erste Verbesserungen erfahren!

Evtl. macht es ja Sinn, diesen Post ebenfalls in die "Steuertricks" zu verschieben?

Danke nochmal, und GruÃŸ vom Bodensee,
Holger

=====

Aw: Lenkrad Tips gefragt...

Geschrieben von Gerald Forte - 30.01.2019 04:42

Hi,

als Thrustmaster-User hab ich damit probiert:

```
FFB Device Type="1" // Type of FFB controller: 0=none 1=wheel, 2=stick/custom, 3=rumble pad.  
FFB Effects Level="4" // Number of FFB effects to use: 0=No Effects, 1=Low, 2=Medium, 3=High, 4=Full, 5=Custom.  
FFB Gain="0.70000" // Strength of Force Feedback effects. Range 0.0 to 1.0.  
FFB Throttle FX on steer axis="1" // 0 = Throttle effects on throttle axis, 1 = throttle effects on steering axis.  
FFB Brake FX on steer axis="1" // 0 = Brake effects on brake axis, 1 = brake effects on steering axis.  
FFB steer vibe freq mult="0.20000" // Controls frequency of steering vibration. Recommended: 0.5 to 1.0, 0.0 disables steering vibration.  
FFB steer vibe zero magnitude="0.03500" // Magnitude of steering vibration at 0mph (reference point).  
FFB steer vibe slope="0.00000" // Slope of line defining magnitude as a function of frequency (used with FFB steer vibe zero magnitude).  
FFB steer vibe wave type="0" // Type of wave to use for vibe: 0=Sine, 1=Square, 2=Triangle, 3=Sawtooth up,
```

4=Sawtooth down.

FFB steer force average weight="0.60000" // How much weight is given to new steering force calculations each frame (0.01 - 1.0). Lower values will smooth out the steering force, but will also add latency.

FFB steer force exponent="0.80000" // Steering force output "sensitivity". Range 0.0 to infinity. 0.0 to 1.0 = higher sensitivity, greater than 1.0 = lower sensitivity.

FFB steer force input max="11500.00000" // Recommended: 11500 (-11500 if controller pulls in the wrong direction).

FFB steer force output max="1.80000" // Maximum force output of steering force, recommendation 0.8 to 2.0

FFB steer force grip weight="0.90000" // Range 0.0 to 1.0, recommended: 0.4 to 0.9. How much weight is given to tire grip when calculating steering force.

FFB steer force grip factor="0.60000" // Range 0.0 to 1.0, recommended: 0.2 to 0.6. How much of a factor the front wheel grip is on the steering weight.

FFB steer update thresh="0.01500" // Amount of change required to update steer force/vibe (0.0 - 1.0). Lower values = steering force updated more frequently = lower frame rate.

FFB steer friction coefficient="0.17500" // Coefficient to use for steering friction. Range: -1.0 to 1.0

FFB steer friction saturation="1.00000" // Saturation value to use for steering friction. Range: 0 - 1.0

FFB steer damper coefficient="0.17500" // Coefficient to use for steering damper. Range: -1.0 to 1.0

FFB steer damper saturation="1.00000" // Saturation value to use for steering damper. Range: 0 - 1.0

FFB throttle vibe freq mult="0.17000" // Scales actual engine frequency to force FFB vibration frequency. Suggested range: 0.10 to 0.50

FFB throttle vibe zero magnitude="0.09000" // Magnitude of engine vibration at 0rpm (reference point).

FFB throttle vibe slope="0.00000" // Slope of line defining magnitude as a function of frequency (used with FFB throttle vibe zero magnitude).

FFB throttle vibe wave type="0" // Type of wave to use for vibe: 0=Sine, 1=Square, 2=Triangle, 3=Sawtooth up, 4=Sawtooth down.

FFB throttle vibe update thresh="0.08000" // Amount of change required to update throttle vibe (0.0 - 1.0)

FFB brake vibe freq mult="0.90000" // Scales actual brake rotational frequency to force feedback vibration frequency.

FFB brake vibe zero magnitude="0.10000" // Magnitude of brake vibration at 0mph (reference point).

FFB brake vibe slope="0.00000" // Slope of line defining magnitude as a function of frequency (used with FFB brake vibe zero magnitude).

FFB brake vibe wave type="0" // Type of wave to use for vibe: 0=Sine, 1=Square, 2=Triangle, 3=Sawtooth up, 4=Sawtooth down.

FFB brake vibe update thresh="0.05000" // Amount of change required to update brake vibe (0.0 to 1.0)

FFB rumble strip magnitude="0.35000" // How strong the rumble strip rumble is. Range 0.0 to 1.0, 0.0 disables effect.

FFB rumble strip freq mult="0.60000" // Rumble strip frequency multiplier 1.0 = one rumble per wheel rev.

FFB rumble strip wave type="0" // Type of wave to use for vibe: 0=Sine, 1=Square, 2=Triangle, 3=Sawtooth up, 4=Sawtooth down.

FFB rumble strip pull factor="1.50000" // How strongly wheel pulls right/left when running over a rumble strip. Suggested range: -1.5 to 1.5.

FFB rumble strip update thresh="0.07500" // Amount of change required to update rumble strip effect (0.0 - 1.0)

FFB jolt magnitude="1.00000" // How strong jolts from other cars (or walls) are. Suggested Range: -2.0 to 2.0.

FFB Joy Axis Spring Saturation Pos="1.00000" // DirectInput Saturation to use for spring

FFB Joy Axis Spring Coefficient Pos="0.00000" // DirectInput Coefficient to use for spring

FFB Joy Axis Spring Saturation Neg="1.00000" // DirectInput Saturation to use for spring

FFB Joy Axis Spring Coefficient Neg="0.00000" // DirectInput Coefficient to use for spring

FFB Joy Axis Spring Saturation Pos="1.00000" // DirectInput Saturation to use for spring

FFB Joy Axis Spring Coefficient Pos="0.00000" // DirectInput Coefficient to use for spring

FFB Joy Axis Spring Saturation Neg="1.00000" // DirectInput Saturation to use for spring

FFB Joy Axis Spring Coefficient Neg="0.00000" // DirectInput Coefficient to use for spring

FFB Joy Axis Spring Saturation Pos="1.00000" // DirectInput Saturation to use for spring

FFB Joy Axis Spring Coefficient Pos="0.00000" // DirectInput Coefficient to use for spring

FFB Joy Axis Spring Saturation Neg="1.00000" // DirectInput Saturation to use for spring

FFB Joy Axis Spring Coefficient Neg="0.00000" // DirectInput Coefficient to use for spring

FFB Joy Axis Spring Saturation Pos="1.00000" // DirectInput Saturation to use for spring

FFB Joy Axis Spring Coefficient Pos="0.00000" // DirectInput Coefficient to use for spring

FFB Joy Axis Spring Saturation Neg="1.00000" // DirectInput Saturation to use for spring

FFB Joy Axis Spring Coefficient Neg="0.00000" // DirectInput Coefficient to use for spring

FFB Joy Axis Spring Saturation Pos="1.00000" // DirectInput Saturation to use for spring

FFB Joy Axis Spring Coefficient Pos="0.00000" // DirectInput Coefficient to use for spring

FFB Joy Axis Spring Saturation Neg="1.00000" // DirectInput Saturation to use for spring

FFB Joy Axis Spring Coefficient Neg="0.00000" // DirectInput Coefficient to use for spring

FFB Joy Axis Spring Saturation Pos="1.00000" // DirectInput Saturation to use for spring

FFB Joy Axis Spring Coefficient Pos="0.00000" // DirectInput Coefficient to use for spring

FFB Joy Axis Spring Saturation Neg="1.00000" // DirectInput Saturation to use for spring

FFB Joy Axis Spring Coefficient Neg="0.00000" // DirectInput Coefficient to use for spring

FFB Joy Axis Spring Saturation Pos="1.00000" // DirectInput Saturation to use for spring

FFB Joy Axis Spring Coefficient Pos="0.00000" // DirectInput Coefficient to use for spring

FFB Joy Axis Spring Saturation Neg="1.00000" // DirectInput Saturation to use for spring

FFB Joy Axis Spring Coefficient Neg="0.00000" // DirectInput Coefficient to use for spring

FFB Joy Axis Spring Saturation Pos="1.00000" // DirectInput Saturation to use for spring

Forum - Altbierbude - Altbierbude - Dein freundlicher GTL-Server FireBoard-Forum-Version: 1.0.4 Generiert: 9 May, 2024, 01:01

```
FFB Joy Axis Spring Saturation Neg="0.00000" // DirectInput Saturation to use for spring
FFB Joy Axis Spring Coefficient Neg="0.00000" // DirectInput Coefficient to use for spring
FFB Joy Axis Spring Saturation Pos="0.00000" // DirectInput Saturation to use for spring
FFB Joy Axis Spring Coefficient Pos="0.00000" // DirectInput Coefficient to use for spring
FFB Joy Axis Spring Saturation Neg="0.00000" // DirectInput Saturation to use for spring
FFB Joy Axis Spring Coefficient Neg="0.00000" // DirectInput Coefficient to use for spring
```

Und das scheint mit gut zu funktionieren.

Kommt am Ende in die Datei mit Deinem Fahrernamen: X.Y.PLR

offe es hilft :-)

GruÃŸ
Geraldo

=====

Aw: Lenkrad Tips gefragt...

Geschrieben von Gerald Forte - 30.01.2019 04:43

Gilt als FFB Tweak fÃ¼r GTL und ist sogar von Jimmy Broadbend getestet :-)

=====