

INTERNATIONAL SLOTCAR CHAMPIONSHIP

March 14/15, 2015



17-2-2015, Rev.0

Marcel Minnaard (Minardi)

Contact/information: www.slotforum.com , rcs64rms@gmail.com

1. BRIEFING

Welcome racers, to the first online digital international slotrace ever ! Thank you for participating and making this event possible.

Imagine roaring GT's from all over the world, revving their engines, ready for the challenge, battling for victory. All this is now possible from your local track in your living room or club, connected by the internet you feel the pressure of the drivers at the other end of the world and see how the race evolves. After 2 hours of endurance racing we know which team gets the honour to be the first Digital Online World Champion! I am ready for It. I hope this document helps you prepare for the event to make It something we will never forget and hopefully is the start of a new chapter in SSD racing.

Marcel

2. Timing:

Since the race is held at different locations around the world, we have to deal with time differences. For this race the times will be;

UK It will be March 14. Practice start 20:00. Qualify 20:30, 21:00 start race (2 hours endurance)

the Netherlands and France +1 hr. (22:00 race start)

USA (Pacific) March 14, practice 13:00, qualify 13:30, race 14:00

New Zealand Sunday March 15, practice 09:00 qualify 09:30, race 10:00

Check your local time here:

<http://www.timeanddate.com/worldclock/meet...2=16&p3=234>

3. CARS

STANDARD modern Scalextric GT with interior and lights (Super Resistant cars not allowed)

(C-numbers as reference);

- *Aston Martin DBR 9 – C3196*
- *Audi R8 – C3386*
- *Chevrolet Corvette C6r – C 3189*
- *Ferrari F430*
- *Ford GT – C3088 (road version allowed)*
- *Jaguar XKR GT3 – C3081*
- *Lotus Evora – C33871*
- *McLaren MP4 – C3389 (road version also allowed)*
- *Porsche 911 GT3R – C3194*
- *Bentley GT3*
- *Maserati Trofeo*
- *Lotus Exige*
- *Chevrolet Camaro GT – C3391*

Examples of liveries:



4. CAR SETUP

BASICS

Before start of the event, cars should be in original shape with at least spoiler (if they originally have one) and light lenses.

- NO MAGNET
- TYRES ; Route1Racing Urethane Medium Compound (Shore A50) size MSN or MSW for back tyres

1 set of rear tyres allowed, in case of failure of tyres (highly unlikely), replace by original stock scalextric tyres.

Front tyres; stock tyres

Original motor and gear/bushing/wheel hubs/interior/lights

ALLOWED

Glueing in the motor, axles bushings

Glueing the rear hubs

Spacer in the rear axle to avoid having the tyres wobbling around

Putting ferrite man on leads

Lubrication

Spacer for recessed guides

Adding 10 grams of weight is allowed (anywhere)

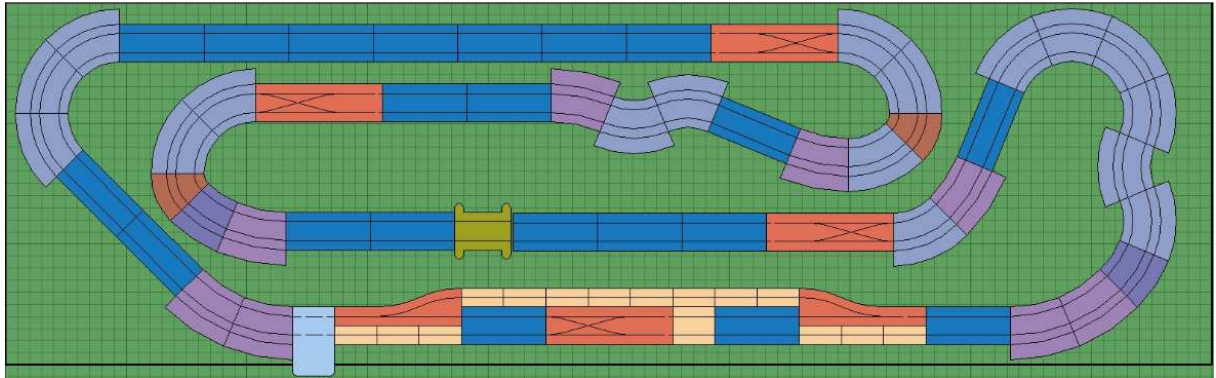
NOT ALLOWED

Upgraded chips

Minimizing weight (removing (plastic) parts of interior, filing etc.

Pictures of winning cars (race winner, fastest race lap, fastest qualify lap) interiors and proof of weight after the event.

5. Track:



Scalextric Sport

- R1 - Orange. 2 pieces
- R2 - light blue. 17 pieces
- R3 - Deep Purple. 2 pieces
- R4 - Violet. 8 pieces.

Track length to be entered in race management tab : 17 m.

ALLOWED

- Power taps
- Borders/custom borders – anywhere
- Less XLC's (ex. 3 instead of 4)
- Exchanging full straight by 2 half straight
- Shorter pitlane
- INOX/Wd40
- Crimping the rails
- Individually powered LC's

NOT ALLOWED

- Guard rails
- CLC's
- Painting the track

6. Hardware

Powerbase: Scalextric C7042 APB-firmware 1.09

At least 1 x Standard Scalextric PSU 15V, 4 Amps, alternative Toshiba laptop PSU with same specs allowed. (2 standard PSU's allowed)

High Power Variable Voltage Mod allowed, set voltage on 12,5 V

Controllers: All types of controllers allowed.

Teams should inform race organisation about their track and accessoires (controllers, power taps) set up and proof of voltage setting for variable PSU's.

Powerbase separated from track piece allowed.

7. Software-RMS

Race Control System 64 version F1 edition (See amendment 2 for version info)

We will race this event with FUEL LOAD SIMULATION and TYRE WEAR SIMULATION.

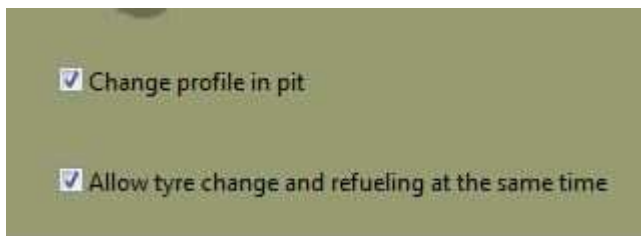
RCS64 has a Youtube channel with instruction video's and a manual on the www.rcs64.com website.

In this document I will highlight the specific settings for this event. Make sure you are familiar with RCS64 and at least have practiced pit stops and tested fuel load simulation and tyre wear.

MAIN PAGE IMPORTANT SETTINGS

Make sure you have the F1 edition of RCS64.

It is allowed to use any throttle profile you wish. You can use the defaults, change them or make new profiles, and decide what profiles should be connected to your team controller (selectable) in the driver setup. **You can then change the profile during pit stops.** That is what the check mark is for. If you are ok with a profile (linear for example) and do not intend to change profile during the race, It is advised to turn this option of to prevent mistakes during pit stop.



It is allowed to **change tyres and refuel at the same time**. For this event, refuelling from 0-100% will last about 30 seconds, tyre change 20 seconds. If you start refuelling you can now scroll to tyre change and start the change in parallel.

Other things to check in Main Page are the **minimum lap time setting** (for this track 5 seconds will do) and the way you want the pit menu to open. Personally I prefer LC pressed for 2 seconds to **open pit menu**.

RACE MANAGEMENT

For testing/practice, make a new event like this;

1 Click 'New'

2 Rename text field (**EVENT RACE NAME TO BE CONFIRMED-THIS IS IMPORTANT FOR LIVE INTERNET STANDINGS**)

3 Save

4 Change track name

5 Select the Event Options (click on the **green** leds);

Burn Fuel

Fuel load simulation

Tyre wear

Make sure damage and weather is unchecked.

Make sure False Start Detection is OFF

Main page | Race management | Tyre wear | Sound | Pacer | Throttle setup

Controller | Drivers/Car setup | Single Event | Series

Saved events
 Practice All 20 mins
 GP 50 all
 GP 10 all
 GP 50 laps none
 P+Q+GP 50 none
 P5Q10GP50
isc test(3-2-2015)

New
 Delete
 Save

Start Event

Track name
 mrflippan

Prac Time 00:20
 Qualify Time 00:15
 Race Endurance 00:20

Reset Fuel/Tyre/Dam

Event options
 Refuel speed (0-200) 75 Fast Slow

☐ False start detection

Race end
 First car(GP)/Time is Out(E)

☐ Burn fuel
☐ Fuel load simulation
☐ Tyre wear
☐ Weather
☐ Damage

20 Change time (secs)
 20 Full repair time (secs)
 5 Hard sets
 4 Soft sets
 0 Intermediate sets
 10 Avg lap (secs)
 40 % of race with soft tyres

Autoset

Random Weather
 3 Random weather types

IMPORTANT SETTINGS;

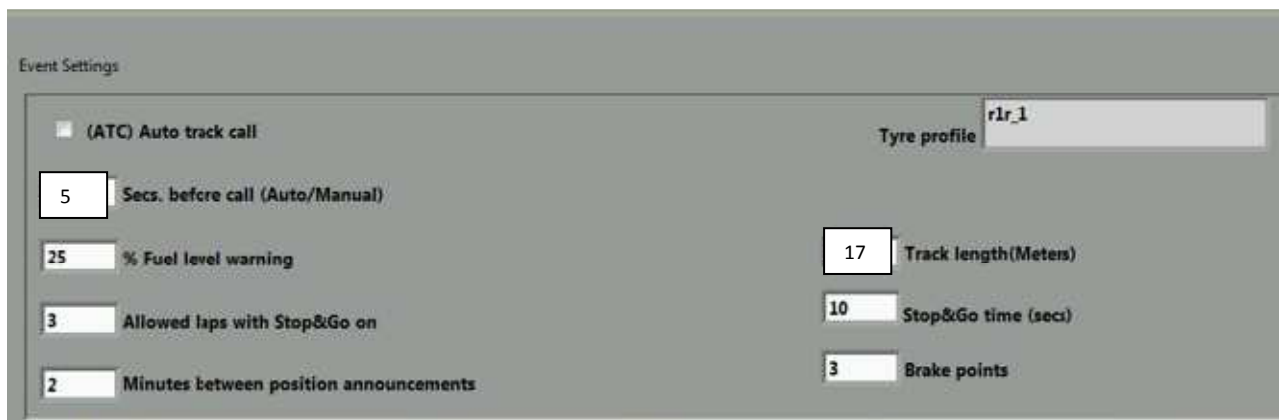
- REFUEL SPEED: [75]
- RACE END: First Car (GP)/Time is Out (E)
- CHANGE TIME [20] seconds (TYRE CHANGE)
- [5] HARD SETS
- [4] SOFT SETS
- Select the Practice/Qualify/Race settings - Time/Time/Endurance
- Set times you want for testing.
- Click the LEDs for Reset Fuel/tyre/dam after qualify and race. (otherwise you start with less fuel/less tyres)

For the OFFICAL RACE:

PRACTICE 20 MINUTES

QUALIFY 20 MINUTES

ENDURANCE 2 HOURS



The screenshot shows the 'Event Settings' window with the following settings:

Setting	Value
(ATC) Auto track call	<input type="checkbox"/>
Tyre profile	r1r_1
Secs. before call (Auto/Manual)	5
% Fuel level warning	25
Allowed laps with Stop&Go on	3
Minutes between position announcements	2
Track length(Meters)	17
Stop&Go time (secs)	10
Brake points	3

Other important settings:

AUTO TRACK CALL NOT ACTIVATED !

(at least) [1] sec before track call. Advised to set this high (5 sec) to prevent unwanted calls.

[25%] Fuel level warning: This is up to you, It is the % you get an audio warning

[3] Laps Allowed before Stop&Go has to be taken (from 4th lap, laps won't count)

[17] m. track length (only for post race analysis)

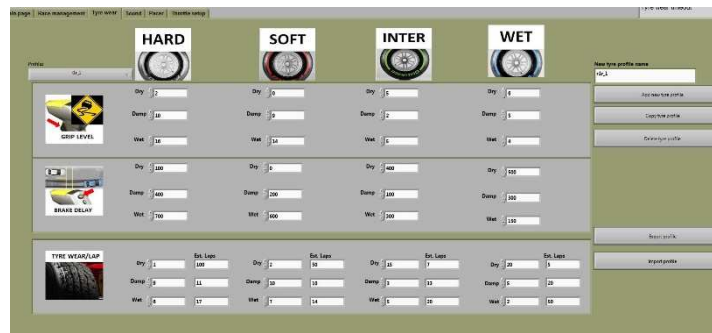
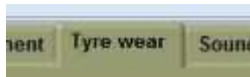
[10] seconds Stop & Go time

[3] brake points. Brake more than 3 times in a lap is extra tyre wear. (1% / lap more for each extra tap on brake/dynamic brake)

[2] min. between position announcements. RCS64 will inform you about the standings for your track every x minutes. Change this to whatever you want.

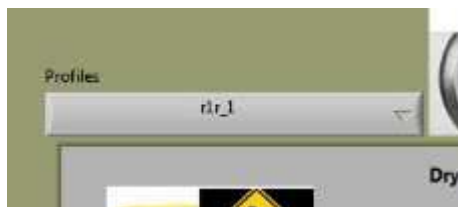
NOTE THE SELECTED TYRE PROFILE, THIS IS THE PROFILE USED IN THE EVENT, r1r_1

TYRE WEAR



Since we don't use weather simulation, only settings for HARD and SOFT tyres on DRY track are applicable

The easiest way to make the r1r_1 profile is to select the default NoMagnetti profile.




Select NoMagnetti at drop down.

Then select 'Copy Tyre Profile'




Change the name to r1r_1




HARD



SOFT



Profiles r1r_1

 <p>GRIP LEVEL</p>	Dry 2	Dry 0
	Damp 10	Damp 9
	Wet 16	Wet 14
 <p>BRAKE DELAY</p>	Dry 100	Dry 0
	Damp 400	Damp 200
	Wet 700	Wet 600
 <p>TYRE WEAR/LAP</p>	Dry 1	Dry 2
	Damp 9	Damp 10
	Wet 6	Wet 7
	Est. Laps 100	Est. Laps 50
	Est. Laps 11	Est. Laps 10

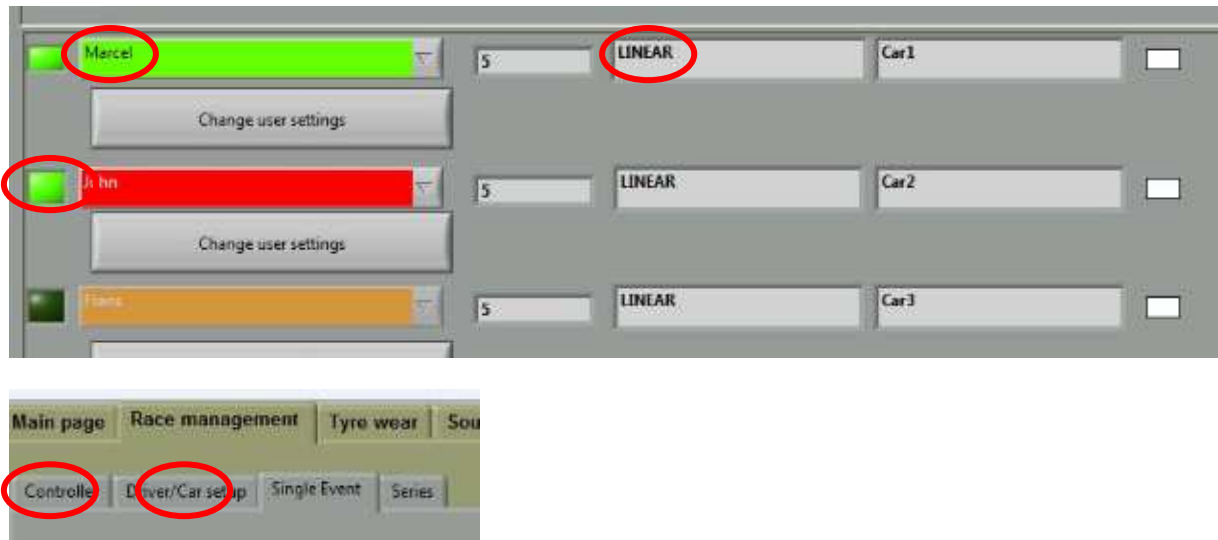
Change/check the values in the red circles. Other values are not important for this event.

There is no SAVE button, just click in the screen.

Make sure the r1r1_1 is selected in the dropdown, and is now the selected profile in Race Management tab/Single Event.

DRIVERS/TEAMS/CARS

In the Race Management tab/Single Event you will find the driver/controller/car combination



Before you can select a name, you have to make sure this exists.

Add (team)names in the driver/car set up tab. In the driver/car set up tab you can select your preference for braking (dynamic, button) and default throttle profile, as well as the profiles you may wish to select during pit stops. Alternatively, click 'Change User Settings'

In the controller tab you indicate the kind of controller you are using and enable/disable controllers, select car and select fuel level at start.

To set up the cars, click on the driver/car set up tab, and then **SET UP CARS**.

Click on an available default car to change name and picture, or add NEW car.

What is important, is to set the **TANK SIZE to 400**

All other values are default ,but please check them.

Once you changed the value(s), select the other cars for this event with CTRL, and select 'Use this setting for all cars'

Double check to see if the cars now have a tank size of 400.

The power related to fuel level is default.

Power control

%Fuel level	%Power
100	85
90	86
80	87
70	88
60	90
50	92
40	94
30	96
20	98
10	100
5	100
1	100
0	40

Tank size

Power(%)
(when no fuel burn is selected)

Safe speed(%)

Burn rate
1 is normal

Use this on all cars

Car1

Use this cars settings for all chosen cars

I refer to the RCS64 you tube channel for information on how this all works, but should be straight forward.

You can add a picture if you wish.

8. RACING AND RULES

The goal is to to race a 2 hours endurance race at different locations around the world at the same time, with the same type of cars, same software, same track lay-out and same rules.

At this point it seems we will manage to have a special build of RCS64 which has the ability to upload data every x seconds to a website that mixes this data semi-real time so we will see live standings of all locations on one web site.

In any case, if this for some reason may not work, RCS64 will always generate a post race html with results. Besides that, the result viewer on the main page can export laptimes of the event to an excel file for post race analysis. And than can of course be mixed with the files of the other locations.

It will be clear that the winning team is the team with the most completed laps after 2 hours of racing. In case of a tie, qualification result counts.

For this endurance race (and practice/qualify), fuel load simulation and tyre wear will be used. Settings for tank sizes and tyres are discussed earlier in this document.

Fuel load simulation

Tank size is set at 400, burn rate 1.

The more fuel in the car, the less power. A full tank will give you 85% power.

Your driving style/throttle use influences the fuel burn. Since it lasts about 20-30 seconds for a full tank to be filled, you can imagine that saving a pit stop for fuel might be just enough to win this event.

When in the pit lane, you can open the pit menu and start refuelling. You can always cancel the refuelling at any stage and exit the pitlane.

Use practice and qualify sessions to learn about fuel burn rate, tyre wear, lap times and length of pit stops.

Tyre wear

Just like in real racing, your tyres will wear, simulated by the software.

RESPONSE TO THROTTLE

RCS64 will influence the response of the car in relation to the throttle. Hard tyres have a small delay on throttle input. Soft tyres delay is 0, immediate response. The setting for Hard tyres this event is something you hardly feel, but it is present. This is for DRY track.

RESPONSE TO BRAKE BUTTON

For this track, we set amount of brake points to 3. This means, normally I would tap the brake button 3 times in a lap.

Tyre wear/lap for Soft tyres = 2%. This means as long as you drive your laps and don't brake more than 3 times, wear will be 2%/lap. Brake 4 times, wear will be +1% = 3%.

If you use dynamic brakes, It counts the amount of times you release the trigger.

If you don't brake at all, your wear will be less. Not braking will save you tyres and fuel, but are you as fast as a car that brakes ?

For Hard tyres, we use a setting '100'. This means as tyres wear, response to brake command increases every lap until 100. Translate this to the track; first lap your can brake 20 cm before the corner, this distance becomes longer every lap, and at tyre level 20% It is very well possible the brake distance is 50 cm., so you have to brake earlier.

Either team can choose to brake with the brake button, dynamic by releasing trigger or no brakes at all. All these settings have their pros and cons, think good and practice to decide what works best for your team.

Throttle profile

RCS64 has quite a few interesting default throttle profiles. A throttle profile is the link between the trigger of the throttle and the motor. Default is linear, but you can use (or make/edit) profiles that make the motor react different on the throttle, like for instance more 'feel' in the lower part, or with a limited maximum to save fuel (but will give you less top speed).

Practice and test as much as you can and think good about which profiles you want to assign to the driver (team). You can switch profiles during pit stops, but the more you have connected, the longer it will take to scroll. Or maybe you are happy with one profile, in that case you can uncheck the option in the main screen to change profiles during pit stops and will limit the chance you make a mistake. It is up to the team!

TEAMS

A team consists of 2,3 or 4 drivers. Every team has 1 main car and 1 replacement car. Drivers rotate with the intention that every driver races about the same amount of time.

How a team divided the race time is up to the team.

However, **changing of driver is only allowed during a pit stop.**

Important !

- **Team members that are not racing should act as an independent, unbiased marshall. However, fuel/tyre information can be passed on to your team mate while marshalling. Always keep an eye on the track. Marshalls are allowed to decide about stop and go penalties. There should be no discussion, if a marshall calls for a stop and go, the person closest to the keyboard (or the race engineer) awards the stop and go manually by entering the F1-F6 keys. (Car ID).**
- **If a location has 1 human team, a constant speed pace car should be placed on track during all sessions. The pace car should be in the lane where pit in is located.**
- If a location decides to divide all the drivers over all the cars of that location, authorisation for this has to be given by the race organisation. In any case, all the drivers have to race about the same amount of time and the drivers / teams have to decide in advance about what to do when they win a price.
- Every team is allowed to have 1 spare car. Once placed on track, there is no turning back, the race **MUST** be finished with the spare car.
- During pit stops, it is allowed to pick up the car while the refuelling/tyre change process is ongoing for (quick) maintenance like cleaning tyres, changing braids, remove dust etc.

- In case of bad rear tyres, THE ORIGINAL SCALEXTRIC STOCK TYRES SHOULD BE USED TO FINISH THE RACE.

When entering the pit lane, drive the car as far as possible in the pitlane, so other cars can stop behind you.

If the pit stop of the following car is faster, than so be it, he has to wait unless the car is removed of the track for maintenance.

STOP AND GO

STOP and GO penalties can be applied by when a car hits another car from behind, or hits a car during the lane change. Changing car is always the car that should get the penalty. A car that exits pit lane and hits car on main straight should get a stop and go penalty.

Stop and go penalties to be served in the pit lane. It is not allowed (and technically not possible) to combine a stop and go with a regular stop for fuel or tyres.

BLUE FLAG;

NO BLUE FLAG! Meaning, slower cars are allowed to fight faster cars, It is up to the faster car to make a pass.

PRACTICE

No limit in changing drivers. Use practice time to test car and keep an eye on fuel burn and tyre wear.

QUALIFY

Qualify decides the start position of the race. Pole position (fastest driver) start on first track piece before start/finish on inner lane. 2 nd position start in inner lane the length of a full straight behind etc. R2, R3 and R4 count as full straight, meaning that start position 20 is at the XLC before the final combination of bends.

RACE

Standing start based on qualifying results. Race length 120 minutes.

The winning team is the team with the most completed laps after 120 minutes.

In case of a tie, qualify result counts.

Winning country is the country with the best average of completed laps. Total laps per country divided by amount of teams.

PRICES

First Price : 2 SCORPIUS controllers and 2 dongles (Most completed laps)

Second Price : 1 SCORPIUS controller and 1 dongle (Runner up)

Third Price : 1x Scalextric Ford GT (C3290) (Fastest Race Lap)

Fourth Price : 1x Scalextric Ford GT (C3290) (Fastest Qualify Lap)

- Laptime not valid when car deslots after passing Start/Finish !
- Team that wins price for the fastest qualify lap, can not win the price for fastest race lap. And the other way around. Price goes the team with the 2nd fastest lap time in that case.

Amendment 1

LOCATIONS, TEAMS & CARS

To be updated

Amendment 2

RCS 64 version number:

Settings for LIVE WEB PAGE RESULTS;

To be updated