

1/24th Scale Auto Regulations as used in Nordic Championships 2015

Basics for the race

The Nordic Championship event is run as an endurance race over 6 hours (8x45 minutes). Denmark, Finland, Norway and Sweden are represented by two teams each. It is at the discretion of each nation to select their teams. All teams must be presented and fees paid by January 10 in the year of the event.

The championship is organised in Sweden 2015 (23-24 January), Finland 2016, Denmark 2017 and Norway 2018.

The most number of laps made over the 6 hours decides who wins the championship. This is decided by the lap counter.

The race is run on an 8 lane track of a minimum length of 40 meters providing 12,5 Volts loaded.

A team consists of 3 or 4 members. Each member in a team of 3 must drive a minimum of 110 minutes and in a team of 4 a minimum of 85 minutes.

During lane changes, which are 2 minutes, no work on the cars is allowed - work on the car may only be done under green light. Lane changes are administered by the race direction.

If the ground clearance is found to be in breach of the rules during the race, it must be rectified under green light. If found after the end of the race in post tech it will result in the loss of the total laps scored in the best race bracket during the race.

Parts falling off the car during racing must be replaced under green light except for revision mirrors and wind screen wipers. Rear wings must be re-mounted properly in the event of mounts breaking or wings falling off. Cars have to be taken off the track to be repaired within 3 laps after they have been found faulty.

The word "Track" can be used to call for power off by active drivers and turn marshals in the following situations: a/ the car becomes a rider, b/ a car under the bridge, c/ a car falling off in the straight in front of the drivers, d/ a car positioned in the in-fields. Additional zones may be decided by the race direction. Illegal track calls by drivers are penalised by a 2 lap deduction for each infraction.

Cars being serviced or repaired must be replaced in the service zone marked out by race direction.

The starting fee per team is 200 Euro including 3 pairs of handout wheels trued down to 27,5 mm and branded, as well as breakfast, lunch and dinner on racing day.

Event organizers provide all actual scrutineering tools for the event at the start of official practice. These tools must include a scale measuring to at least 1/10th of a gram, specific callipers or gauges for measurement of the front and rear spur and specific callipers or gauges to measure the minimum front wheel diameter and width. Specific gauges to measure ride height before, during and after the race is also be provided at this time. The tool to measure RPM is also available. These tools will be the only ones used by the scrutineer(s) during the event.

Practice is run as a lane per team in pre-defined stints.

Each team has to provide a turn marshal at all times in the race and in practice. A missed marshalling duty leads to a deduction of 10 laps in the race for each infraction.

The race director is running the event and decides on rule interpretation. To aid the director a race jury is elected at the race meeting. The race jury consists of one representative from each nation.

Unsportsmanlike conduct breaching the spirit of the rule set, the sport and competition is penalised by the race direction on its discretion by warnings, lap deductions or disqualifications.

Time table

Friday

16.00-17.45 Open practice in 5 minute stints
18.00-22.00 Practice as 2 rounds of 8x12 minutes

Saturday

07.30 Venue open
08.00-10.00 Practice as 1 round of 8x12 minutes
10.15-10.45 Technical inspection
11.00 Race meeting, race jury and lane draw
11.30 Lunch
12.15 Start
19.30 Prize ceremony and race dinner

Technical rules

1.1.0. GENERAL DESCRIPTION

(a) The only cars permitted to enter are:

(i) The Scale Auto Porsche 911 GT3 RSR(997). (Not the GT3 Rally or GT3 Cup versions).



(ii) The Scale Auto BMW M3 GT2.



(iii) The Scale Auto Jaguar XKR-RSR GT2.



(iv) The Scale Auto Mercedes Benz SLS GT3.



(v) The Audi R8 LMS GT3.



(vi) The BMW Z4 GT3

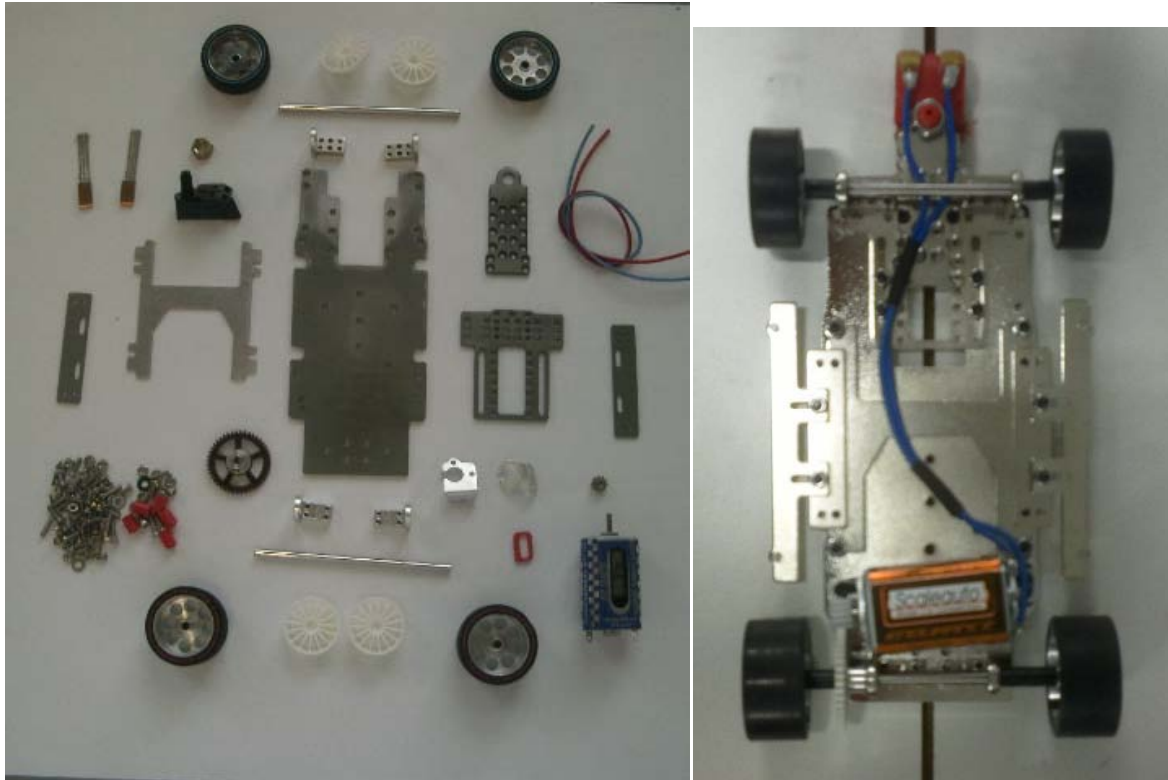


(b) It is the responsibility of the racer to ensure that the purchased Scale Auto cars are accurate, complete and without missing parts. (Including small plastic and photo edged parts.)

(c) An original example of homologated Scale Auto cars as described by Art.1.1.0 (a) will be at Technical

Control as reference for the Technical Director and Scrutineers. In the case of all disputes, the judgement of the Technical Director (or race jury) will be final and binding.

(d) All of the chassis and body parts that come with the Scale Auto cars as described in Art. 1.1.0.(a) must be used. See Rules-Pictures for additional clarification.



If a part is shown in these pictures it must be on the car according to the manufacturer's intended mounting and location. The only exceptions are as follows: Art. 1.1.3. (b).

1.1.1. MODIFICATIONS

(a) It is not permitted to modify the RTR car or white kit in any way other than those parts of free make as described by Art. 1.1.1 (b)

(b) Parts of free make are restricted to: (i) nuts, bolts, spacers and washers, (ii) the guide and guide nut, (iii) braid, braid clips & lead wires, (iv) axles, (v) axle bearings, (vi) ballast lead weights, (vii) 3 – dimensional wheel inserts, (viii) M50 spur gear, (ix) M50 pinion gear.

(c) Scale Auto tuning parts including the carbon H-plates, spring plates, guides holders, axle holders with suspension, carbon rear wings (excluding the wing supports) etc. are NOT permitted.

(d) The adjustable rear axle holder from Scale Auto, part no. SC8121 is allowed.

1.1.2. WEIGHT, DIMENSIONS & GROUND CLEARANCE

(a) The minimum weight for a complete Scale Auto car is 190.0g at technical inspection.



(b) The minimum weight for the body with the body mounts and fixing screws attached is 55.0g at technical inspection.



(c) The ground clearance will be measured with the guide out of play so that all four wheels sit flat on the tech block.

(d) The ground clearance at the start of every race is never less than 1.2 mm.

(e) The ground clearance during or at the end of any race is never less than 0.8 mm.

(f) Additional weighting of the body can only be applied to the vertical surfaces of the plastic reinforcing strips within the boundaries as shown in the picture below.



(g) The distance from the top of the H plate to the bottom of the chassis plate is never more than 4.0mm.

(h) Additional weighting of the chassis may only be on top of the chassis, NOT visible when viewed from below.

1.1.3. CHASSIS (only non-drop arm version is allowed).

(a) The chassis must be assembled with screws and/or nuts and bolts using the original mounting holes.

(b) The chassis must be assembled in the exact manner and orientation of the production RTR car. In this instance it is noted that some RTR cars are shipped with the guide holder mounted below and other above the T-plate. It is therefore up to the racer to decide which position he prefers for the guide holder on his car.

(c) The chassis plates may be flat sanded to remove burrs, sharp edges and swelling.

(d) The original mounting holes can be re-countersunk to properly seat the screws flash to the bottom of the plate.

(e) The original MSC/Scale Auto logo on the bottom face of the main chassis plate must remain visible to the Technical Control. On chassis plates with painted logo's it must be preserved by using transparent tape over it.



(f) The original chassis plates, parts and metal body holders cannot be repainted or refinished in any way.

(g) The length of the guide blade cannot exceed 27, 0 mm and this guide blade is the only part of the

chassis that may enter the track's slot.

(h) No part of the chassis may be visible when viewing the car from above.

(i) The chassis magnet and its housing, available on some chassis models, must be removed. The only magnets allowed in the car are those in the motor.

1.1.4. MOTOR, GEAR AND PINION

(a) The motor used is a Scale Auto SC-26 Endurance. No hand out motor is provided. The motors are tested using a test instrument for a maximum rpm and current usage on the rear wheels at 12,5 Volts. The rpm and current is clarified in the invitation to the race.



(b) Soldering may only be used to attach the lead wires to the motor terminals.

(c) Motor coolers or heat dissipating products of any kind are not permitted.

(d) Only M50 pitch pinion and M50 spur gears are permitted.

(e) The gear ratio is fixed at 12:44.

1.1.5. AXLES, BEARINGS & WHEELS

(a) Only solid steel 3 mm diameter axle's, front and rear, are permitted. No independent front axle configurations of any kind are permitted.

(b) Ball bearings for 3mm axles are permitted.

(c) Front wheels must be either the standard hard rubber wheels with rims as supplied with the RTR cars or have a minimum diameter of 26.5mm when using the RTR Scale Auto racing wheels. The Scale Auto parts SC-2715P or SC-2709P may be used to achieve the 26.5mm minimum diameter.



(d) Each front wheel must make minimum 7.5mm of contact with the tech block with the guide out of play. Front tires may be hardened and polished.

(e) Rear wheels are RTR Scale Auto SC-2421P ProComp 3 wheels with 27,5mm OD, 13.0mm wide. Only the Scale Auto wheels are allowed and may not be substituted with other brands. At events handout wheels and tires are supplied, the handout wheels and tire diameters may not be changed and must be used as supplied.



(f) Rear tires may not under any circumstances be treated with any kind of tire dressing, or compound or traction product.

(g) Removing dirt, dust and loose rubber particles from the tires may only be performed with a tape roll or Shellite provided by the Race Direction.

(h) All four wheels must be fitted with three-dimensional wheel inserts (with or without brake discs and callipers) correct to the car. (No photo edged or vinyl cut reproductions are allowed).

(i) The wheels including inserts may not protrude outside of the body when viewed from above.

(j) No car can have a front spur greater than 80mm or rear spur greater than 83mm, measured at the widest point of the front and rear axles. (This includes any protruding wheel inserts that may be fitted).

1.1.6. BODY & INTERIOR

(a) All bodies and interiors must be painted. (Interiors with at least three different colours and bodies with at least a coat of clear paint covering the complete outside of the body shell).

(b) Fantasy liveries in the spirit of 1:1 motor sport are permitted.

- (c) Three number shields typical of 1:1 motor sport are required.
- (d) Only the stock rear wing uprights may be replaced or reinforced with rubber parts of equal or like shape. The Scale Auto Carbon Rear wing may not be used, but the rubber wing mounts supplied with these wings may be used. (Should a wing go missing or get broken beyond repair a replacement part may be purchased as long as it is the original part as sold by Scale Auto. For example the BMW part number is SC-7612 and the Mercedes is SC-7614 etc).
- (e) All the cars are permitted to use the full Scale Auto Lexan window and interior kits. The roll cage from the original hard plastic interior must be refitted to the lexan interior.
- (f) Mirrors and wipers on some cars are very fragile and cars will be allowed to continue the race without them when it is obvious that the mirror(s)/wiper(s) has broken off during racing.
- (h) No modifications of the body are permitted other than those described by Art. 1.1.6(a-e)

1.1.7. ADDITIONAL NOTES & CLARIFICATION TO RACERS.

- (a) Metal body mounting brackets SC-8117 can be used in place of the plastic part as first shipped on the Porsche 911 RSR GT3 cars in early 2010.
- (b) Only Scale Auto lexan interior and window kits may be used where allowed. (The air vent - photo below - that comes with the Audi lexan window and interior kit is not allowed).



- (c) The gas filler caps in the Mercedes that are molded into the lexan windows should be trimmed away so that the original plastic filler caps are used. This principal will also apply whenever a lexan part may be moulded with corresponding external body parts restricting the figment of the lexan window.
- (d) When fitting the lexan interior the legs of the roll cage may be shortened to be able to fit it into the space between the lexan interior floor and the roof of the car. Currently this is only the case on the Mercedes SLS.



(e) The BMW Z4 white kits are supplied with four small front winglets, these may be used at the discretion of the builder. The body kit is also supplied with two different rear wing mounts. Either of these may be used. However, if the mounting legs are replaced with a flexible material, the secondary wing between the mounting legs must be retained.



or



This rule set is compiled by Lars Harrysson (287@embrey.se) and Rolf Andersen in 2014.