



TECHNICAL REGULATIONS

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Preamble

These regulations are applicable to 1/32 scale entry-level models of mixed type GT cars. The formula is designed a starting point for the novice or club racer to become accustomed to DiSCA GT racing using mostly standard specification model cars and equipment, with some scope for performance enhancing modifications.

The technical specification caters toward mass-production slot car manufacturers as apposed to specialist performance brands. Model manufacturers intended to be used for GT4 racing include;

- Scalextric / Superslot (Hornby Hobbies)
- Carrera
- Ninco and Ninco 1
- SCX
- Policar

The formula is intended to become a stepping stone en-route to racing GT3 Euroseries. For a more box-stock approach, see dedicated GT4 Clubman regulations for Scalextric and/or Carrera GT models. It is to be noted that this open specification does not serve as a balance of performance across makes.

Regulations in orange italics are recommendations, but may be freely interpreted by the race director. The intention of these regulations is that they may serve as guidelines for domestic racers and small clubs, where local restrictions or variations may require a flexible approach to rule making.

1. Body

- 1.1. Body shells must be plastic injection-moulded replicas of road-going sports or GT cars. Racing versions and street versions are allowed. Examples include, but are not limited to, those given in the table below;

Table 1.1 - Examples of eligible bodies

Scalextric	Carrera	Ninco 1
BMW Z4 GT3	Corvette C7.R	Chevrolet Camaro GT
Porsche 911 / 991	Ferrari 458 Italia	Ford Mustang GT
McLaren 12C	Lamborghini Huracan	Corvette C6.R
Lotus Evora GT4	Mercedes AMG GT	

- 1.2. A driver's cockpit with clearly defined dash, driver's head, shoulders/bust and steering wheel, must be fitted.
 1.2.1. *In the case of a body with no driver's cockpit (eg Ninco 1, Scalextric Crash Resistant), the race director may chose to impose a 5.0g mandatory ballast affixed in the centre of the roof*
- 1.3. Where headlights are fitted as original equipment, they must remain connected and working.
 1.3.1. This rules also applies where lights are mounted to the chassis (eg Scalextric)
 1.3.2. *It is the recommendation of DiSCA that headlights are fitted to all cars for improved visibility when racing multiple cars per lane*
- 1.4. Vulnerable body parts such as wings, spoilers and mirrors may be rubber-mounted. Modifications must be sympathetic to the final appearance of the model
- 1.5. The minimum allowed mass for the body, excluding screws, is 25.0g
 1.5.1. Any ballast needed to make up the minimum body weight must be placed to the underside of the interior tray beneath the space in which a passenger figure would occupy.

2. Chassis

- 2.1. Chassis must be original equipment, as supplied with the model from the factory
 2.1.1. Chassis must be of one-piece construction (without pod), with the exception of SCX cars. Pod float of SCX cars must be limited by the motor prongs or tape on the underside of the chassis only.
- 2.2. Chassis modifications for fit and clearances of components are allowed;
 2.2.1. Area directly beneath crown gear may be cut / removed to give clearance for an aftermarket crown gear and/or improved ground clearance
 2.2.2. A hole no bigger than 2.0mm diameter may be drilled for crown gear grub screw access
 2.2.3. Any other non-specified modification to the chassis is illegal
- 2.3. Offset axels are illegal. The axis of the motor shaft must be on an identical plane with the rear axel
- 2.4. The body must be mounted to the chassis using the original fixing locations and methods
- 2.5. Screws and washers are free

3. Motor & Transmission

- 3.1. Unless otherwise specified, motor must be original equipment rated at or below 20,000rpm at 12.0v;
 - 3.1.1. Scalextric 18–20,000rpm s-can
 - 3.1.2. Carrera 20,000rpm E200 s-can
 - 3.1.3. SCX 19,000rpm FR42 hybrid can
 - 3.1.4. Ninco NC2, NC5, NC9 or NC11 boxer / short boxer motors
 - 3.1.5. Policar 13,600 rpm V12 s-can
- 3.2. Motor cans must be insulated from the circuit rails
- 3.3. *Motor shafts may be shortened under the supervision of a race official*
- 3.4. Any other motor modification is illegal
- 3.5. Gear ratio must be 3.0:1, or as supplied as original equipment by the manufacturer.
 - 3.5.1. *Policar models must use the original crown gear, but are awarded freedom over the number of teeth on the pinion gear when fitted with the original 13,600rpm motor.*
- 3.6. Make and type of gears are free

4. Wheels & Tyres

- 4.1. Wheels may be either original equipment, or any aftermarket alloy or plastic wheel of 17.3mm diameter
- 4.2. Wheels must be of a “solid boss” design
 - 4.2.1. Air system wheels or those with machined bosses are illegal
- 4.3. Wheels must have a three dimensional spoke pattern. Plastic moulded inserts are acceptable
- 4.4. Front tyre compound is free, but must be rubber.
 - 4.4.1. Front tyres may be glued or varnished
- 4.5. Rear tyre compound is to be specified by of the race director
 - 4.5.1. *The legality of glueing rear tyres is to be specified by the race director*
- 4.6. When viewed from above, tyre edges must be contained within the widest point of the wheel arch

5. General

- 5.1. Minimum overall mass is 75.0g
- 5.2. *The legality of traction magnets is to be specified by the race director*
- 5.3. Ballast is allowed, but subject to the following criteria;
 - 5.3.1. Ballast must not be visible from any view of the car, including when viewed from the bottom
 - 5.3.2. Ballast must be securely fixed in place at all times
- 5.4. Axels are free, but must be solid steel
- 5.5. Axel bearings are free but must be plain centred bushings.
 - 5.5.1. Ball bearings, spherical combination bearings and eccentric (off set) bearings are illegal
- 5.6. Spacers and stoppers are free
- 5.7. Guide blade is free, and may be trimmed or fashioned to aid clearances where necessary

- 5.8.** Cables, braid and connectors are free.
 - 5.8.1.** Braid must be trimmed to a length shorter than the guide flag
- 5.9.** No mechanical parts of the car, except for the guide flag, wheels and tyres, should be visible from any angle when the car is placed on the circuit.
 - 5.9.1.** The guide flag must not extend beyond the front of the car. In other words, the guide flag must not be visible in plan view.
 - 5.9.2.** Wireless antenna may be visible
 - 5.9.3.** It is not necessary to cover gear teeth protruding from the bottom of the chassis
- 5.10.** All cars must be compliant with DiSCA Appendix C: GT4 Pro (technical illustration)
- 5.11.** The race director maintains final authority on the legality of any car

6. Change Log

- v3.2 Sections 2.1 amended to include use of tape to control SCX motor pod float
Sections 4.1 and 4.2 revised to better accommodate original equipment wheels and clarify alternatives
Section 5.7 changed to allow free choice of guide blade

Appendix C: DiSCA GT4 Pro

These regulations are applicable to 1/32 scale entry-level models of mixed GT cars. The formula is designed as a starting point for the novice or club racer to become accustomed to DiSCA GT racing using mostly standard specification model cars and equipment, with some scope for performance enhancing modifications.

Chassis must be either of the following only;

- Original equipment with in-line motor orientation
- Original equipment with sidewinder motor orientation

Chassis modifications for the fit and clearances of components are allowed.



Front tyre compound is free, but must be rubber.

Axels are free, but must be solid steel

Guide blade is free. Braid must be trimmed to a length shorter than the guide flag

Cables, braid and connectors are free.

*Digital Chip
(reference only)*

Motor must be original equipment, rated at or below 20,000rpm at 12.0v.

The legality of traction magnets is to be specified by the race director

Ballast is allowed,

Rear tyre compound is to be specified by of the race director

Gear ratio must by 3.0:1, or as supplied as original equipment by the manufacturer Make and type of gears are free

Bearings are free, but only concentric plain bearings are allowed. Ball bearings are illegal

Wheels may be any alloy or plastic with 17.3mm diameter and solid boss

