

OPEN



TECHNICAL REGULATIONS

version 2.0
26/06/2021

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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 / Sueperslot (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 of the association, 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. The original driver's cockpit may be replaced with a polycarbonate (a.k.a. lexan) copy, with clearly defined dash, driver's head, shoulders/bust and steering wheel.
- 1.2.1. All driver's cockpits must be decorated. Unfinished cockpits are illegal
- 1.2.2. Original driver's cockpits may be trimmed for the benefit of fit and clearances
- 1.2.3. *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*

2. Chassis

- 2.1. Chassis must be either of the following only;
- 2.1.1. Original equipment with in-line motor orientation
- 2.1.2. Original equipment with sidewinder motor orientation, or
- 2.1.2.1. Sidewinder chassis may be replaced with a 3D-printed chassis from a normal distribution network so that they may be converted to in-line motor orientation.
- 2.2. Chassis modifications to aid the fitment of digital chip and/or light kit are allowed
- 2.3. Chassis modifications for fit and clearances of components are allowed
- 2.4. Any other non-specified modification to the chassis is illegal
- 2.5. Offset axels are illegal. The axis of the motor shaft must be on an identical plane with the rear axel
- 2.6. Suspension is illegal.
- 2.6.1. *Where a separate motor pod is used, screws must be fully tightened.*
- 2.7. The body must be mounted to the chassis using the original fixing locations and methods
- 2.8. Screws and washers are free

3. Motor & Transmission

- 3.1. Motor must be original equipment, rated at or below 20,000rpm at 12.0v.
- 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
- 3.6. Make and type of gears are free

4. Wheels & Tyres

- 4.1. Wheels are free, but must have a matching diameter to those supplied as original equipment
- 4.2. Front tyre compound is free, but must be rubber.
 - 4.2.1. Front tyres may be glued or varnished
- 4.3. Rear tyre compound is to be specified by the race director
- 4.4. *The legality of glueing rear tyres is to be specified by the race director*
- 4.5. *Maximum width for rear tyres is 11.5mm*
- 4.6. When viewed from above, tyre edges must be contained within the widest point of the wheel arch

5. General

- 5.1. *The legality of traction magnets is to be specified by the race director*
- 5.2. Ballast is allowed, but subject to the following criteria;
 - 5.2.1. Ballast must not be visible from any view of the car, including when viewed from the bottom
 - 5.2.2. Ballast must be securely fixed in place at all times
- 5.3. Axels are free, but must be solid steel
- 5.4. Bearings are free, but only concentric plain bearings are allowed. Ball bearings are illegal
- 5.5. Spacers and stoppers are free
- 5.6. Guide blade is free, but must be compatible with the circuit and lane changing mechanism
 - 5.6.1. The guide blade may be trimmed or fashioned to aid clearances where necessary
- 5.7. Cables, braid and connectors are free.
 - 5.7.1. Braid must be trimmed to a length shorter than the guide flag
- 5.8. 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.
 - 5.8.1. 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.
 - 5.8.2. Wireless antenna may be visible
 - 5.8.3. It is not necessary to cover gear teeth protruding from the bottom of the chassis
- 5.9. *Minimum ground clearances at the start of the race are recommended as follows;*
 - 5.9.1. *0.5mm ahead of the guide blade*
 - 5.9.2. *1.8mm beneath the centre of the motor*
- 5.10. All cars must be compliant with DiSCA Appendix C: GT4 Trophy (technical illustration)

Appendix C: DiSCA GT4 Trophy

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, or
- Sidewinder chassis may be replaced with a 3D-printed chassis from shapeways or normal distribution network so that they may be converted to in-line motor orientation.



Front tyre compound is free, but must be rubber.

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

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

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)

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

Ballast is allowed,

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 are free, but must have a matching diameter to those supplied as original equipment

