



Canterbury Radio Controlled Car Club Rule Book

1. Overview

- 1.1. The Canterbury Radio Controlled Car Club has established rules that are voted on via a remittance notice provided to the committee at each of the club's AGMs.
- 1.2. These rules provide governance and clarity during events not covered during an official NZRCA meeting.
- 1.3. The club follows the general rules and class rules set from the national body known as the NZ Radio Controlled Car Association (NZRCA).
- 1.4. These rules must be followed for an official NZRCA race meeting, however, the club via the AGM can change or insert rules as long as they are documented, voted and passed using the clubs constitution.
- 1.5. This document is version controlled, each time a rule(s) are changed, a new version will be made, and copies distributed via the website, and / or in the club house for members to review.

2. General Rules

- 2.1. Outside the hours of club events the gate must be locked after entry. Access to the park cannot be given to non-club members without a club member present.
- 2.2. All club events are run under the NZRCA rules and regulations with the following club rules for club events added. Any additions of rules must be approved by way of a vote from currently registered and financial club members, during the club AGM.
- 2.3. All racers are expected to cooperate with the health and safety policies and / or Race Director instructions
- 2.4. All racers expected to wear protective clothing when necessary eg. Hi-vis vests, correct footwear etc, and not interfere with that, of which, is provided in the interest of health and safety.
- 2.5. All racers are expected to report all health and safety concerns to the race director or a member of the CRCCC Committee.
- 2.6. No Smoking or Vaping within track or pit areas.
- 2.7. Tables or drivers and cars outside the usable area are not deemed the responsibility of the CRCCC, and as such are expected to be responsible for their own health and safety.
- 2.8. For any class running on a club day, a minimum of 3 drivers must be present at the start of the day in order for that class to be run in their own race. Race classes may be combined at the committee's discretion.

- 2.9. Points shall be awarded over the course of the CRCCC racing season.
- 2.9.1. These points will awarded on the following basis
- 18 points - 1st place
 - 15 points - 2nd place
 - 13 points - 3rd place
- 2.9.2. 4th place will receive 12 points, 5th 11 points, and so on until either the number of points or drivers are exhausted.
- 2.9.3. 1 extra point is given to the driver that has the top qualifying (TQ) position for the final. If this driver is not a member, then this point is awarded to the next driver of which is a member.
- 2.9.4. Only members will retain their season points, and only from when the membership fee is paid. A discretionary period around the clubs AGM / End of year for points retention is permitted.
- 2.9.5. Drivers that achieve points, but are not members, forfeit their points to the next driver who is a member.
- 2.10. CRCCC Season period is from the 1st of September, until the 31st of August..

3. 1/10th Touring Stock Rules

- 3.1. Touring stock cars allowed to run a 21.5 blinky motor of their choice

4. 1/8th GT Rules

The NZRCA 1/8th Internal combustion rules (<https://www.nzrca.co.nz/rules>) apply except:

- 4.1. All GT cars are to run commercially made and available rubber tyres. No foams allowed.
- 4.2. GT electric cars are allowed to run with the gas powered GT cars and must run rubber tyres as above.

5. 1/8th GTe Rules

5.1. **General**

- 5.1.1. The class run will be the Electric 1/8 GTE On road.
- 5.1.2. The official measurements in these Technical Specifications are metric measurements.
- 5.1.3. All measurements referred to in these rules are maximum or minimum values.
- 5.1.4. It is the object of these rules to ensure that racing is a test of driver skill.
- 5.1.5. It is the responsibility of the driver to ensure that their car complies with the rules and regulations at all times it is on the track. The organizer may check any car at any time during the championship for compliance with the regulations. On checking immediately after a race, if a car is found to be under the minimum weight or has incorrect dimensions, positive proof of race damage may prevent disqualification.

5.2. **Motor**

- 5.2.1. Any motor up to a maximum rating of 2200kV.

5.3. **Battery**

- 5.3.1. LI-POLY (LITHIUM POLYMER) Hi Voltage BATTERIES allowed. Capacity 2x 2S batteries or 1 x4S battery.
- 5.3.2. Batteries must be factory sealed in a hard case. Lipo/LiFe batteries MUST be charged in a closed Lipo Sack/Bag at all times.
- 5.3.3. No soft cased batteries allowed, for primary battery source.

5.4. **Body**

- 5.4.1. Bodies are to be any commercially available 1/8th scale GT1, GT2, Super GT, DTM, or V8. Supercar cars. Prototype (LM) P1, (LM) P2 and open cockpit bodies are not allowed. Wedge shaped bodies are not allowed. For the definition of a wedge a body will be considered a wedge and therefore illegal if it includes an integrated wing which is equal to or greater than height than the roof line of the car. Body shells with a small kick up at the rear are legal for the purpose of the class (for example Serpent McLaren body)
- 5.4.2. The entire chassis, wheels and engine must be covered by the body when mounted to the car as viewed from above.
- 5.4.3. The body must be made from a flexible material and painted. Where used, the gurney strip must remain transparent.
- 5.4.4. Bodies must include full front and rear fascia's, and conform to the rules herein that limit openings in the body for antenna holes.
- 5.4.5. Bodies must be reasonably detailed. The body must have visible window, body panel and trim markings. Light tinting of the windows is permitted.

5.5. Technical Specifications Electric 1/8 GTE On-road

- 5.5.1. Cut-outs in the body that were not in the original full scale version will be allowed for the following:
- Bodies are not to be cut above the lower bumper line at the front or the back, or above the bottom line of the doors. Maximum 70mm cut-out at rear on 20mm blocks.
 - The aerial hole will be no larger than 10.0mm in diameter
 - All bodies must have the front and rear sides cut out for the wheels, the radius of the cut-out must not exceed the tyre by more than 20mm.
- 5.5.2. Gurney strips may only be used on bodies with an integrated spoiler.
- 5.5.3. Maximum width of body and wing/spoiler is 330 mm.
- 5.5.4. Wing and spoiler, must have a chord of no more than 79 mm.
- 5.5.5. Additional cut-outs in rear built-in spoilers are not allowed.
- 5.5.6. No additional items may be fastened to the body exterior other than the rear gurney strip, or rear wing/spoiler.
- 5.5.7. If body stiffeners are used they cannot cause the body to be wider than 330mm across the lower edges of the body. Body or wheel flares extenders are not allowed.

5.6. Chassis

- 5.6.1. Any shaft driven 1/8 scale buggy, truggy and GT based electric powered vehicle.
- 5.6.2. All cars must have operating brake(s) capable of stopping the car.
- 5.6.3. The front of the car must be equipped with a bumper in such a manner that it will minimize a wound in the case of it entering into contact with participants or members of the public. The bumper must be made from a flexible material with all corners and sharp edges rounded off. The contour of the bumper will follow the contour of the body with which it is being used. At no point may the bumper protrude in front of the body.
- 5.6.4. The aerial support must be flexible. Carbon, GRP, steel, etc. are not allowed.
- 5.6.5. Hop up and optional chassis are permitted however vehicles must fall within weight limits specified Chassis may either be flat or have a front kick up.
- 5.6.6. The minimum weight is 3500g. The weight will be checked with battery/batteries, body and a transponder installed.
- 5.6.7. Overall dimensions:
- Length Maximum: 509mm
 - Width Maximum: 330mm
 - Height: 220mm (20mm blocks)
 - Wheelbase Maximum: 270 – 380mm
- 5.6.8. The car must roll freely between the inspection measuring rails with any steerable wheel set in the straight ahead position, irrespective of the compression or extension of the suspension

5.7. Transmission and Drivetrain

- 5.7.1. A shaft-drive system with front and rear differentials is required. Belt driven cars are not permitted.
- 5.7.2. Single speed transmission only and must include a solidly mounted spur gear to a standard bevel gear centre differential or a solid spool (no one-way bearing). No other differential types will be permitted.
- 5.7.3. One-ways, spools, locking "Torsion-type," or externally adjustable differentials are not permitted. Differentials can only be tuned with the use of silicone-based oils.
- 5.7.4. Front and Rear differential gear ratios must be identical. Front or rear underdrive or overdrive is not permitted.

5.8. Wheels and Tyres

- 5.8.1. Any commercially available rubber tyre and insert GT8 or 1/8 Scale on-road designed wheel and tyre is allowed. Full slick or tread pattern allowed. Rubber tyres only. No foam tyres allowed.
- 5.8.2. Tyres must be black, except for writing on sidewalls.
- 5.8.3. Wheels must use a 17mm hex hub consistent with the dimensions and function of the hubs used in 1/8 off-road racing. The wheel must be affixed by a 17mm wheel nut, threaded on to the hex hub. Quick change mechanisms are not permitted.
- 5.8.4. Tyre Warmers are permitted. No Traction Compounds allowed

5.9. Technical Exclusions

- 5.9.1. It is not allowed to use any electronic devices with the exception of:
- 5.9.2. Two radio channels of the receiver which will be used to operate steering, throttle and brakes
- 5.9.3. No more than two servos.
- 5.9.4. A transponder.
- 5.9.5. Fans which must be powered from the main battery packs
- 5.9.6. The use of traction control devices, active suspension devices and any steering control aided by gyroscopes/'G'-force sensors is strictly forbidden. Exemption may be granted for drivers with physical disabilities. This includes Spektrum and Traxxas Receivers with Stability Control unless those functions are specifically disabled.

5.10. Not allowed:

- 5.10.1. Liquid cooled engines.
- 5.10.2. Hydraulic braking systems.
- 5.10.3. More than single speed transmissions.
- 5.10.4. Quick change wheel systems are not allowed.
- 5.10.5. Body extenders or wheel flares .
- 5.10.6. Buggy/Truggy type wings.

6. 1/8th Can-am E

This class follows the NZRCA 1/8th Internal combustion rules (<https://www.nzrca.co.nz/rules>) except:

The club rules deem the following NZRCA rules to be omitted or replaced:

- 6.1. Qualifying order for NZRCA Nationals, section C5
- 6.2. All cars must have declutching device, rule C8.1
- 6.3. IC On-Road Championships section C10
- 6.4. Mufflers, section C29
- 6.5. 30mm holes in body C30.2
- 6.6. 10mm holes in body C30.4 (Section replaced with club-rules 6.12)
- 6.7. Exceptions in vehicle coverings C30.5
- 6.8. Ins Box, section C32
- 6.9. Engine, section C33 (Section replaced with club-rules 6.13)
- 6.10. Fuel, Section C36 (Section replaced with club-rules 6.14)

The club-rules **supersede** the NZRCA IC rules:

- 6.11. C6.10, a race shall be a maximum 6 minutes long
- 6.12. C30
C30.4 Only 1 10mm hole for an antenna / aerial is permitted
- 6.13. C33
C33.1 Brushless electric motors only permitted
- 6.14. C36 Fuel
C36.1 The battery capacity shall not exceed 4s in total