

Ministox rules

This class is based on the principles of close, fair, and low-cost racing. Suggested makes include the Mardave Assassin, Kamtec Mini Racer & Battcave JOK3R chassis.

Performance is limited by construction, and cars should be run “out of the box,” with only minor modifications such as manufacturer-produced parts.

General rules

- Cars may use any make of clear Lexan Austin/Morris/BL Mini shells (NO ABS).
- No convertibles or pick-ups can be run.
- Body shell Kit supplied wings/spoilers are allowed, but must be to the following dimensions.
 - 160mm wide (max).
 - 35mm depth +/- 3mm.
 - 25mm side height +/- 2mm.
 - 15mm max height from the top of the shell.
- Windows must be clear, no tint or blackout.
- Headlamps and grills must be defined. Lights are not to be used on the car.
- Shells must have no sharp edges that could cause harm to other racers/marshals or damage to the carpet.
- Shells must run a minimum clearance of 4mm.
- Body and chassis must be securely joined at all times while the car is on the track.
- The wheel rim diameter (not the tyre) maximum is 40mm, and 26mm width.
- Wheels must be fixed using a single fixing.
- Only MR33 V4 or V5 tyre treatments are permitted.
- Wheel nuts and/or axles must not protrude more than 2.0mm beyond the outer edge of the wheels. No more than 1.5mm of the wheel outer side may be exposed (not covered with foam) on the outer edge of wheels.
- Rigid bumpers made from non-resilient materials such as metal are not allowed. Other sheet materials should be no thinner than 1.5mm; anyone found to be repeatedly damaging the track markings or other racers' cars due to running big bumpers will be asked to change to a softer construction of bumper.
- The minimum ground clearance of the car, excluding the spur gear, is 4mm.

Motors (Brushless)

Any 25.5 turn or higher brushless fixed-timing, sensored motor. Motors must be readily available.

Recommended

- Hobbywing G2.1 25.5 FTM
- Surpass Rocket Supersonic 25.5 FTM
- BattCave IMPOST3R 30.5T fixed timing brushless motor

Brushless ESC

The following types shall be used:

- XR10 JUST STOCK Zero Timing (HW3011200)
- XR10 JUST STOCK G3 (HW30112003)
- XR10 JUST STOCK G3s (HW30112005)
- Surpass Supersonic ESC
- Team Powers XPS Sport V4BT (TPR-XPS/Sport-V4BT-2S-EXT)

Other ESCs need to be submitted to the club for review; they must meet the following criteria:

- Can be run in Blinky mode only
- £75 max limit

Motors (Brushed)

- Mardave G2 F20 (#G2 F20)*
- Core 21 Silver Can (#CR711)*
- Etronix Sport 540 Tuned Stock 20T (ET0320)*

These cannot be tampered with in any way. Motors may be water bathed. Motor additives are allowed. Motor Spacers can be used.

*to be used with 4-cell Sub-C Metal Hydride battery pack.

Brushed ESC

Any commercially available brushed speed controller with a list price of less than £60.

Gearing

For the 2025 session, gearing is now open (pinion and spur) but restricted to 32dp.

Wheels & Tyres

Commercially available foam tyres of suitable type, such as Contact, JFT, and Mardave / Kamtec, are to be used.

Only MR33 V4 or V5 Carpet Additive may be used.

Chassis and Components

- The main chassis component will consist of one continuous sheet of material. It can be either fibreglass, carbon, or aluminium.
- The overall maximum width of the rolling chassis is to be 165mm. 7.3 Wheelbase is to be 176mm +/- 3mm.
- Chassis components must be commercially available.
- The chassis bottom must be flat with no protruding fixings.
- No modifications are allowed to the chassis, but edges may be smoothed, sanded, or sealed.
- 2 springs may be fitted on the front end, and up to 3 springs may be fitted to the rear.
- A solid axle must be used. No differential.
- Rolling element (ball) bearings are allowed on the front and rear axles.

Ground Clearance & Weight Limit

All cars must maintain a ground clearance of 4mm; no screw or fitting should protrude below the bottom of the chassis.

Ground clearance is defined as follows: The club's 4mm gauge should be able to pass under the car from front to rear and from side to side when the car is standing in race-ready condition without the car moving.

Any movement of the car, either laterally or vertically, will be deemed a failure.

Cars must weigh a minimum of 840 grams (including personal transponder, excluding handout transponder), ready to race, including bodyshell.

Batteries

For use with brushless motors: Any commercially available 2S Lipo. Solid cased racing packs only (soft cased model aircraft packs not permitted on safety grounds).

LiPo must be in a hard casing; refer to the **SRCC general rules** for further information on safe usage and maximum cell voltage.

For use with brushed motors: A 4-cell Sub-C Metal Hydride battery pack may be used in "stick" or "saddle" format. These must be readily available to purchase. Batteries may be wrapped, but the club can ask for the wrapping to be removed for inspection if required.

Radios and Servos

Any commercially available RC equipment functioning on the 27 MHz, 40 MHz or 2.4 GHz bands is acceptable.

Any commercially available servo with a list price of less than £50 shall be used.

Please note that the Race Director's decision is final in all matters concerning the eligibility of cars to run, but the prime consideration will always be safety for both the club and the venue.

Definitions

1. **MUST** – This word, or the terms “**REQUIRED**” or “**SHALL**”, mean that the definition is an absolute requirement of the specification.
2. **MUST NOT** – This phrase, or the phrase “**SHALL NOT**”, means that the definition is an absolute prohibition of the specification.
3. **SHOULD** – This word, or the adjective “**RECOMMENDED**”, means that there may exist valid reasons in particular circumstances to ignore a particular item, but the full implications must be understood and carefully weighed before choosing a different course.
4. **SHOULD NOT** – This phrase, or the phrase “**NOT RECOMMENDED**” means that there may exist valid reasons in particular circumstances when the particular behaviour is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behaviour described with this label.
5. **MAY** – This word, or the adjective “**OPTIONAL**”, means that an item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because the vendor feels that it enhances the product, while another vendor may omit the same item. An implementation which does not include a particular option **MUST** be prepared to interoperate with another implementation which does include the option, though perhaps with reduced functionality. In the same vein, an implementation which does includes a particular option **MUST** be prepared to interoperate with another implementation which does not include the option (except, of course, for the feature the option provides).