



HEDNESFORD INDOOR RACEWAY

MINI & HOT-HATCH (HOT-ROD)

BRUSHLESS CLASS Regulations

To ensure all remains as equal as possible we are adhering to the main regulations set out below.

Cars to be 1/12th scale Mardave, Kamtec, BattCave, TWR (Mini or Hot-Hatch)

- 1) The chassis may not be modified in any way.
- 2) **Servos permitted for use are:** (1) Futaba S3003, (2) Futaba S-U300, (3) Core RC 4012, (4) Core RC 9016, (5) Savox SH0257MG or SH0263MG (6) surpass hobby SJ0015M. (7) Powerstar PL2806-LBL. Please note No's 5, 6 & 7 are micro servos and intended for front mounting in the car and that the Savox and Powerstar servos have 21t splice output shaft rather than the more usual 25t spline
- 3) Any servo saver & servo mounts may be used.
- 6) Any track rods, ball cups and balls may be used.
- 7) Any compound of **Foam tyre can be used (Contact wheels/tyres must have a JM prefix). Tyres may be trued. Only Single bolt mounting is allowed. NO 3 bolt mounting wheels.**
- 8) Only ABS or polycarbonate **Mini/Hot Hatch** bodyshells are allowed (Note: The Mini chassis MUST use a BMC 60's style of body ONLY). On ABS bodies windows may be cut out, but if not, they must be clearly defined. Polycarbonate bodyshells are also allowed, and windows must remain clear.
- 9) Any make of body mounts may be used.
- 10) Ballraces are allowed on front and rear axles.
- 11) Rear axle must be steel and remain solid (No Diffs).
- 12) In line with most national series, you are allowed to use any tooth spur gear, however, this must be 32dp. The Mardave Z-drive system is allowed. As is the Kamtec equivalent listed below.
- 13) In line with most national series, you are allowed to use any tooth pinion, however, must be 32dp.
- 14) Any strength suspension springs, front, or rear may be used.
- 15) Any Commercially available (**Fixed timing**) **25.5t or 30.5t Motor under £70.00 RRP** and any Commercially available **Brushless ESC'S under £75 RRP** are allowed. **However, the ESC MUST be set in Blinky Mode.** Any connectors can be used. Please note, Hednesford Indoor Raceway has a non-reversing rule. The motor may be fitted to either side of the chassis, providing there is no modification or alteration to the chassis or mounting blocks. We strongly recommend fitting the motor on the right-hand side looking from the rear of the chassis, this will give more revs and less overheating.
- 16) Cars to use **hard case LiPo batteries** only. Batteries must be either **7.4v or 7.6v LiPo**. Batteries must only be charged to a **maximum of 8.40v and charged / discharged in a LiPo sack at all times.**
- 17) Batteries must be charged or discharged using a LiPo charger on the LiPo settings and must not be charged in **excess of the manufacture's guidelines or over 15A, whichever is lower.** When discharging this must not be in **excess of the manufacture's guidelines or over 20A, whichever is lower.** No heating or cooling of cells are allowed during charging or discharging.
- 18) Your charger may not (at any point in time, whether a battery is connected/charging or not) be set with a cut off voltage higher than 4.20v per cell. Anyone found with a charger setting higher than this will be deemed to be deliberately over-charging their battery, which will not be tolerated on safety grounds. Any driver found with a charger set higher than 4.20v per cell may be excluded from the event.
- 19) Battery mountings must be from the original chassis manufacturer only.
- 20) Only standard kit external front and rear bumpers or Schumacher foam bumpers (U3942) are allowed.

21) Metal bumpers are NOT allowed.

- 22) Steel whip aerials and rollover masts are not allowed, however standard 'straw' type aerial is permitted.
- 23) No wings or aerofoils unless supplied by manufacturer for use with the bodyshell. No under body aids are allowed.
- 24) Only Water based tyre additives are allowed. (See BRCA list)
- 25) There should be a minimum ground clearance of 3mm; this is to include, 1mm clearance for spur gear.
- 26) Front wishbones, suspension, and steering axles must be available from manufacturers no homemade parts and a king pin brace may be added.

We will allow the following 3d Printed parts:

Front Castor and Front Ride Height Plates.

Motor Spacer Plate

Rear Droop holder/brackets

Any additional 3D printed part if cleared by Hednesford Indoor Raceway before use.

Kamtec now have their version on the "Mardave Z-Drive":

<https://www.kamtec.co.uk/p/rh-drive-dog-u3948-schumacher-supastox>

<https://www.kamtec.co.uk/p/lh-drive-dog-u3947-schumacher-supastox>

<https://www.kamtec.co.uk/p/48t-32dp-spur-gear-u3972-schumacher>



Also, we allow any Mardave, Kamtec, Battcave or TWR mini which has been converted to a Hot-Hatch using the manufacturers Hot-Rod chassis, **No Homemade / none manufacturers chassis are allowed**, part numbers. will be added in due course.

NOTE: These are the regulations at Hednesford Indoor Raceway and whilst they are in line with the national rules, if you intend to compete in a national competition or at another club, we recommend that you check to ensure your car meets their requirements to avoid disappointment.

If you are unsure about any of the above, please contact Stuart Evans or Mike Dennison at the Club.